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ABSTRACT

This report presents 1997 supply and demand information about Wisconsin Public School educational personnel using Wisconsin Department of Public Instruction (DPI) data. The analysis found a large supply of teachers in most subjects. The largest number of new licenses was in fields that already had surplus educators. The number of teachers prepared in special education exceeded 800 for the first time since 1980-1981. There was a continuing decline in numbers of newly hired teachers. Attrition rates for 1995-1996 were 6.5 percent for general education and 8.4 percent for special education. Pupil enrollment trends, changes in retirement guidelines, shifting economic trends, and changes in pupil-teacher ratios affected teacher demand. Numbers of available educators exceeded demand in most fields. The percentage of candidates who found positions in Wisconsin Public Schools was slightly higher for most special education fields. Most emergency licensing was in special education. During 1996-1997, there was a 4-percent overall decrease from the previous year in teacher employability in most fields. Fields with excellent employment prospects included: emotional disturbance, speech and language pathology, and technology education. The report recommends that colleges and universities help prospective educators understand these issues as they make career choices. Four appendixes present: (1) Wisconsin DPI license codes, (2) a survey letter sent to district administrators, (3) a survey form sent to district administrators, and (4) comments from district administrators. (Contains 2 figures and 11 tables.) (SM)

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SUPPLY & DEMAND

of Educational Personnel For Wisconsin Public Schools

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An Examination of Data Trends

SB374210

Prepared by Wisconsin Educator Supply and Demand Project
For Wisconsin Department of Public Instruction
John T. Benson, Superintendent

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Supply and Demand of Educational Personnel for Wisconsin Public Schools

An Examination of Data Trends

1997

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Wisconsin Educator Supply and Demand Project
with funding from the Wisconsin Department of Public Instruction

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Preface

This report presents supply and demand information about educational personnel for Wisconsin Public Schools. The complete report is available on the Wisconsin Department of Public Instruction (DPI) Web sight (http://badger.state.wi.us/agencies/dpi/tcert/supplyd.htm). The author hopes this information is of value to those making policy decisions for the state, those administering programs at the University of Wisconsin System schools and Wisconsin's independent colleges and universities that prepare educators, and those wishing to make more informed career choices in education. This report complies with the reporting requirements of **the Individuals with Disabilities Education Act (IDEA), an amendment to PL 94-142**, which requires accurate reporting of personnel needs in special education, complete data on the status of emergency licenses, and future projections of personnel needs for the field.

This is the 17th annual report on supply and demand of educational personnel in Wisconsin. For the first eight years, the report focused only on special education. Since that time, however, the report expanded to include supply and demand information for all teaching fields and non-teaching areas of education. In this way, the supply and demand situation for special education is more easily understood within a larger context.

This report also continues the analysis presented in previous years on the number of newly licensed teachers, the sources of newly hired teachers, and the projected future personnel needs in education. Repeated in the 1997 report are maps on the vacancies and employability of educational personnel in the twelve Cooperative Education Service Agencies (CESA's) areas and the Milwaukee Public Schools (MPS). These maps provide a visual profile of the need for educators across the State of Wisconsin.

Sources of data include information from Wisconsin Public School districts collected on the third Friday of September and reported to the Wisconsin Department of Public Instruction (DPI) in the Exceptional Education Enrollment Report (PI 2300), School District Staff and Teacher Personnel Report (PI 1202), and the educator preparation institutions that provided the number of newly prepared educators eligible for licensure. The supply and demand data analyzed in past Wisconsin studies have documented a surplus of teachers seeking positions in most subject fields and shortages in several areas.

Recent years have shown considerable variation in the number of newly hired teachers in Wisconsin Public Schools. The 1996-97 school year showed a continued decline from the previous two years in the number of new hires. The projections of the employability of educators use the three year average of newly hired teachers so that the yearly fluctuations do not cause bias in the long range analysis used in estimating future educator needs.

The major tables are at the end of the report, making the text for Chapters 1 through 5 uninterrupted. Each chapter begins with highlights of the most important findings, which are followed by supporting information, and explanations.

The factors that contribute to the supply and demand of educational personnel are complex and certain limitations are inherent in this research area. The report primarily deals with educators employed in Wisconsin Public Schools. Certainly, educational opportunities exist in non-public schools, and some graduates of educator preparation institutions in Wisconsin choose to work in other states. Accurate data about these educators are difficult to gather; therefore, it is likely that some errors exist. For this reason, the researcher sought to validate findings by using multiple data sources. Despite these limitations, this report provides a reasonably accurate educator supply and demand picture that will contribute to making the best qualified educators available to all children who attend Wisconsin public schools.

1. Wisconsin Educator Supply Information

Highlights of Findings

- A large supply of experienced and inexperienced teachers continues to be available for Wisconsin public schools in most subject fields.
- The largest number of new licenses continues in fields where large surpluses of educators already exist - elementary, social studies, physical education, and English.
- Approximately 48 percent of newly hired teachers had no previous teaching experience and were trained in Wisconsin educator preparation programs.
- The number of teachers prepared in special education has exceeded 800 for the first time since the 1980-81 year. If the present level (1995-1996) of preparation (857 new teachers) is maintained, there should be a more than balanced supply of teachers in most areas of this field.

Program Completers: Dec. 1, 1995, to Aug. 31, 1996

The 33 teacher preparation programs in Wisconsin were asked to provide data to the Wisconsin Department of Public Instruction (DPI) on the number of license programs completed by educators in the various subject fields and non-teaching areas between December 1, 1995, and August 31, 1996. All programs responded to this request. The Maranatha Baptist Bible College has a newly approved teacher preparation program and will be included in future reports. The researchers grouped the licenses within each broad subject field so licensing variations within a field would not suggest a greater number of prospective teachers available (for example, elementary education included all DPI license codes from 100 through 188; music included codes 506, 511, and 515; social studies included codes 701 through 761). This grouping procedure resulted in a more accurate count of individuals licensed to teach in the various areas of each subject field. (See Appendix A for a complete list of DPI license codes.)

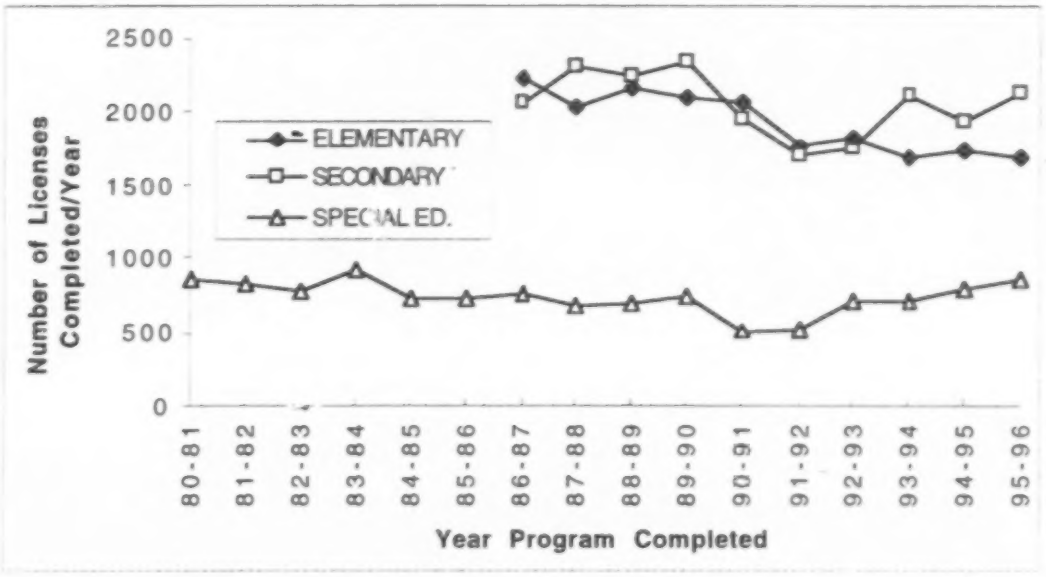
In Wisconsin, high school teachers receive licensure to teach in their major and in certain minor and double major fields as well. Since educators may teach in their licensed minor, this encourages prospective teachers to obtain a minor along with their major. Thus, additional licenses at the secondary level increased the overall employability of high school teachers by approximately 5 percent (see Table 7). The situation is different for elementary education. For example, an elementary education teacher who also has a special education license would have to essentially complete two separate programs--one in elementary education and the other in special education. Yet a teacher with an elementary license can teach at the middle school/junior high level with a minor in a subject field. Elementary education majors with a second teaching major had only a 4 percent increase in their employability by securing a position in an alternate field (Table 7). Many special education majors earned licenses in more than one field, which increased their employability by 11 percent. Most of these multiple licenses occur in other fields of special education or elementary education.

Figure 1, created from data in Table 2, details the longitudinal pattern of the number of newly prepared educators in elementary, secondary, and special education. The actual counts of the licenses earned by each training institution in 1995-1996 are presented in Tables 1.1 and 1.2. Generally, Wisconsin educator preparation institutions have graduated decreasing numbers of teachers in the field of elementary education since the 1990-1991 year, with the current trend

averaging around 1700 teachers for the last three years. There was a nine percent increase in the secondary/speciality fields with many of the areas of increase being in those fields already having a surplus of teachers. A downward trend in the preparation of teachers at both the elementary and secondary levels will need to be supported if the current surplus of teachers in most fields is to be reduced. In Figure 1, the pattern in special education shows the trends from 1981-1996. The 1992-1996 data show that for the past four years there has been an increase in the preparation levels of special education teachers, with the majority being trained in those areas that had the largest shortfall of personnel.

Figure 1

Licensure Programs Completed Over Sixteen Years



Suppliers of Newly Hired Educators With No Experience

The total number of newly hired teachers without experience prepared in Wisconsin educator preparation programs is shown in Tables 3.1 and 3.2 for the 1996-1997 school year. The table includes individuals who may have graduated several years ago, but this is their first education position. The count of individuals is based on the position in which they are employed rather than the field in which they hold licensure. Thus, individuals who are teaching with an emergency license may be graduates of institutions that do not offer preparation in the specific field in which they are teaching. Considering that DPI issues a large number of emergency licenses in special education, this explains the discrepancy between data in Tables 3.1 and 3.2 and other tables in this study. For example, a teacher prepared in social studies may have accepted a position in special education on an emergency license. The 1996-1997 school year had a total of 6 FTE (full time equivalent) teachers with licenses in social studies who were teaching children in programs for emotionally disturbed children. The institution that prepared the social studies teacher is credited with preparing a special education teacher even though it may not have a program in that field. These tables show

the recent contribution of each teacher preparation program to the pool of newly hired teachers.

Sources of New Teachers Hired in Wisconsin

DPI has a licensure record for each teacher who was newly hired in Wisconsin for the 1996-1997 school year. Table 4 shows the breakdown of the sources of newly hired teachers by subject field. An explanation of the categories used in Table 4 follows:

- Wisconsin Newly Hired Educators without Experience designates individuals who have been trained in Wisconsin colleges and universities and have no teaching experience.

- Wisconsin Newly hired Educators with Experience designates individuals who were prepared in Wisconsin colleges and universities and have at least one year of teaching experience and are returning to the field.

- The Experience Educators Relocating includes all individuals who were employed in the Wisconsin Public Schools in 1995-1996 and move to a different Wisconsin Public School district for the 1996-1997 year.

- The two out-of-state categories follow the same patterns described above except that these teachers received their preparation in states other than Wisconsin.

The data in Table 4 was based on the information school districts collected on the third Friday in September and submitted to DPI on the Exceptional Education Enrollment Report. The data in this table, when compared to similar information from previous years, have shown a similar employment pattern, with the major changes this year being an increase in the number of elementary teachers hired without experience and a large decrease in the number of elementary teachers relocating. There also was a decline in the number of teachers hired who received their preparation in other states.

Newly Hired Educators over a Five Year Period

The number of newly hired teachers in Wisconsin Public Schools during the past five years is shown in Table 5. Two different teachers, each employed 50 percent, were counted as one FTE. This has the net effect of reducing the count of the total number of educators employed when the FTE statistic is used. The data collected for Tables 6 and 7 showed that a large proportion of secondary level teachers were recruited and hired on a part-time basis.

Reserve Pool of Educators

The reserve pool of teachers encompasses all teacher candidates who are actively seeking employment in the public schools. An analysis of the reserve pool of teachers validates DPI's computerized data on educators. The researcher completed a study of the reserve pool of teachers seeking positions in September 1996. They sent to each Wisconsin Public School administrator and each Cooperative Educational Service Agency (CESA) director a survey requesting the number of vacancies in each subject field that had been posted in their district or CESA for the fall term (see Appendices B and C). They also requested that each administrator and director rate the number of applications received in relationship to the vacancies in each subject field. A five-category scale which ranged from 0 to 5 for serious shortage of candidates to 50 plus applications for extreme oversupply was provided on the survey. Thus, for each vacancy the researchers gathered two pieces of information--the number of applications and a rating of that number from extreme oversupply to extreme

shortage. Fourteen small districts that had incomplete data or did not respond were not included for a 97 percent return rate. These data are available in Tables 6.1 through 6.7 (Chapter 6) and graphic maps showing the employability of candidates in the large subject fields from these data are found in Chapter 4. Comments from the district administrators on the survey are found in Appendix D.

The researcher reported the school district data using the twelve CESA boundary lines so that individual district variation would not distort the general picture in each geographical region (CESA). The Milwaukee Public School (MPS) data was presented separately because the size of the district would distort the numbers for CESA 1. These maps also show the number of full-time and part-time vacancies of .5 and more totaled on the maps in each CESA area. The ratings of the positions that were listed at .5 or less were not included in the data since the lack of full-time employment suppressed the number of applicants for these positions. The results are shown in detailed on state maps that display the local shortages and surpluses of applicants. These maps show the differences in the employability of teachers in the various geographical areas of the state for the major subject fields. These data are presented in (Table 6) and the maps accompany the outlook in Chapter 4. Since space limitations did not permit the inclusion of all the maps, the reader is encouraged to review Tables 6.1 through 6.7 for more detailed information of specific subject fields.

Support Personnel

School districts employ a variety of personnel to support the educational process. These personnel are an important element in the field of special education. Assessing the availability of support personnel prepared in certain categories (for example, physical therapy, occupational therapy, and speech therapy) is difficult because many of the individuals in these fields are contracted for their services by agencies outside the public schools. A more detailed measure of the employability of these educators is the data from the district survey sent to each special education administrator and is reported in the 1995 edition of this report.

2. Wisconsin Educator Demand Information

Highlights of Findings

- Although the number of newly hired educators fluctuates each year, this year showed a continuing decline in the number of newly hired teachers, reflecting a downward trend from the surge in the 1994-95 year. This appears as a result of lower attrition and less mobility to relocate or return after an interruption in a teaching career.

- The attrition rates for 1995-1996 showed a different picture from previous years with general education just 6.5% which was only slightly lower than the 8.4% found in special education. When all the transfers within education are taken into account the attrition rates are even lower for all fields.

- The demand for educators is affected by numerous factors, including dimensions of growth in pupil enrollment, changes in retirement guidelines, shifting economic trends, changes in the pupil-teacher ratio, fluctuations in the state's birth rate, and policy decisions that impact on educational funding in the state.

- The number of available educators continues to exceed the demand in most fields.

- The percentage of candidates who find positions in Wisconsin Public Schools is slightly higher for most fields of special education. Also high were family/consumer education, English as a second language, technology education, library/media, occupational therapy, and physical therapy.

- The percentage of those prepared who find positions in Wisconsin public schools is smallest in elementary education, social studies, physical education, and marketing. An additional license generally enhances an educator's employment prospects--especially in special education.

- There appears to be a much larger pool of candidates for rural areas near population centers compared to the urban districts.

Availability of Full-Time Positions

The 1996-1997 database permitted the tabulation of educational positions by full-time equivalents (FTE). This information makes it possible to investigate the number of educators who find full-time versus part-time employment. The availability of full-time employment is greatest in elementary and special education. On the other hand it is relatively common to find those employed as middle or high school teachers working part-time. Middle and high school programs are not self-contained and are composed of those who teach in discreet subject fields, and small districts may offer fewer sections of some subjects compared to large districts. A factor which may contribute to the number of teachers hired on a part-time basis at the secondary level is the licensing requirements which limit the flexibility of teachers in certain fields to teach with a minor.

Educators Newly Hired by Wisconsin Public Schools

A profile of all the sources on newly hired educators without experience is shown in Table 4. When the out-of-state and Wisconsin prepared teachers are combined the percentage of

elementary teachers who were hired without experience was 71 percent, secondary education was 53 percent, and special education was 55 percent.

The data in Table 5 shows considerable variation in the total number of educators hired each year. Considering that the growth in the public school pupil population has been very consistent, it appears that the variations in the number of newly hired teachers are often a factor more related to the economy and state policy decisions than to any large increases in pupil population. This can be seen by the large increase in 1990-1991 due to the retirement window followed by a decrease in 1991-1992. The decrease in 1993-1994 appears to be a result of school districts being uncertain about their state funding. The increase in 1994-1995 may be the result of districts having prior knowledge of their level of state support and the rebound from the cutbacks of the previous year. Data from 1995-1996 shows a decrease in the number of newly hired teachers and this decrease continued into the 1996-1997 school year.

Employment Projections for Educators With No Experience

This report provides newly prepared teachers and those with no previous experience an estimate of their probability of employment in Wisconsin public schools by relating the current level of preparation in each subject field to the number of newly hired teachers in the state. The data in Table 7 presents the analysis for the 1996-1997 school year. Because this information is so important in describing the demand for educators in Wisconsin, a detailed explanation of the procedures used to generate the various columns of data follows.

First, the number of Wisconsin prepared teachers who earned their eligibility for new licenses the previous year (column 1) is divided into the number of newly hired Wisconsin-prepared teachers hired during the current year (column 2) in that licensing field. The result is the employment projection (column 3) of teachers who are securing their first positions in that licensing field. Many of the newly hired teachers were prepared several years prior to their first employment and are also included in this projection. Since some teachers in that same licensing field are also eligible for licenses in other teaching fields, the second calculation takes into account all the teachers who have secured employment in some other field in which they also had an additional license. This number is shown in column 4, and the resulting percentage increase in the employment is indicated in column 5. The total of all those employed who earned that license, including those teaching in the field and individuals who secured a position in some alternative field, is shown in column 6. The employment projections (column 7) of teachers holding multiple licenses is obtained by dividing all the newly hired teachers who had a license in that field, even if they were teaching in an alternative area (column 6), by the number of teachers who were eligible for licenses that previous year (column 1). The findings of this employment analysis have generally remained relatively constant over the previous years.

For example, a teacher eligible for a license in both elementary education and learning disabilities and who secured a position as a third-grade teacher is represented in the EL (K-8) row and is one of the 1,693 individuals indicated in column 1. This person has an employment projection in elementary education of 24 percent as indicated in column 3. This person also is counted in the learning disabilities licensing area in column 4, which indicates that 28 teachers holding a learning disabilities license secured positions in some other field. Thus, the higher employment projection of 35 percent shown in column 7 of the learning disabilities licensing field is more representative of this individual's employment outlook. Column 5 of the EL (K-8) row indicates only 4 percent of elementary education teachers had an additional license that contributed to their employment prospects.

Table 7 represents one way to present the demand for educators. The actual projection of teacher needs is so complex that a single formula can lead to errors unless related variables are

considered to understand this information. Important factors to consider in the interpretation of the table include:

1. Nonpublic school and out-of-state employment opportunities are not included in these data. Past data have indicated that the percentage of teachers prepared in Wisconsin who will leave to teach in other states is about the same as the percentage of those prepared in other states who come to Wisconsin to teach (Table 4). Approximately 5 percent will find positions in nonpublic schools, mainly at the elementary level.

2. Many teachers, such as those in early childhood education, early childhood-exceptional educational needs, and speech and language pathology are employed by agencies that are not represented in public school data.

3. The area of reading is omitted because licensure in this field requires that the teachers also have a license in some other teaching field. A number of teachers entering this field are experienced teachers transferring within a school district and would not be identified as new hires in this analysis. Thus, the need for teachers in this field can be more accurately projected by other analyses such as emergency licenses (Chapter 3). The same rationale was followed for other support staff, such as school counselors, library/media specialists, and administrators. Driver education was deleted because the number of newly hired teachers was too small to draw meaningful conclusions.

4. Special education has a large number of teachers employed on emergency licenses (for example, emotional disturbance and learning disabilities). A number of these teachers have experience and consequently do not show up in the category of new hires without experience due to the limitations of the database used. However, these teachers can not be included with the new hires without experience since this year's database did not permit the separation of these teachers, with the result that the projections in Table 7 are suppressed in these two fields. The number of emergency licenses in general education is relatively small and does not represent full-time teaching to the extent that it does in special education so a correction for this factor is not warranted for these fields.

5. To understand the employment prospects it is necessary to take into account the reserve pool and the declining number of positions in various fields. In the past, the field of cognitive disabilities (CD - formerly mental retardation) has been over supplied with teachers. This explains, in part, why 12 percent of the newly hired teachers were employed in other fields, largely in multicategorical (MC) programs. The severely disabled area is included in the CD field because the database does not differentiate between these two licensing areas.

The accuracy of these employability percentages is based on the stability of the pupil population, consistent levels of teacher preparation, variables influencing attrition, and state policy decisions. Fluctuations in these factors will impact on employability. Table 7 provides a comparison of employment opportunities in the different areas of education. It is important to note that the data in this Table represents newly hired, inexperienced teachers who received their preparation prior to August 31, 1996, and were employed during the 1996-1997 school year. Table 9 is a three-year average of the data in Table 7 which smooths out the yearly fluctuations in the employability of newly hired teachers, and thus is, to an extent, the current lifetime projection of the employment prospects in Wisconsin Public Schools. The data in this Table demonstrates large differences in the demand for teachers in the various licensing categories. In recent years, from as few as 20 percent to as many as 80 percent of educators prepared in Wisconsin have secured positions in Wisconsin's Public Schools at some time during their life. The percentage varies considerably for different fields.

Attrition

Teacher attrition is one variable that is traditionally included in predicting the demand for teachers. There are many complex factors to consider when computing attrition statistics. The following are a few of the concerns that can influence the accuracy of a procedure in which attrition is a variable.

1. Attrition statistics that consider combined categories of teachers (e.g. all secondary teachers) will be lower than rates for individual categories (e.g. mathematics or science teachers alone) since transfers between fields will not be taken into account. Similarly, data on an individual school district will reflect correspondingly higher attrition rates since any teacher leaving the district to be employed in any other state district will count in the attrition figure. Also, state attrition figures do not take into account the movement of teachers to other states and thus are inflated to a small extent.

2. The calculation of an attrition statistic involves using the head count of teachers in two successive years of personnel data. Caution must be taken not to use this same head count in the projection of personnel needs since projections should be based on a full-time equivalent (FTE) statistic. For example, not using an FTE statistic would inflate the need of teachers in early childhood programs since many are employed only on a half-time basis.

3. Major state policy decisions, such as a retirement window or a change in state school funding, can have a short-term impact on any attrition statistic.

4. A factor that can inflate the attrition statistics occurs when economic factors cause school districts to reduce their staffs. If the resulting attrition figure is then applied during this period of decreasing staffing, the result is an inflated projection which may not accurately reflect the current employment outlook. Economic impact would also affect the pupil-teacher ratio if districts reacting to fiscal pressures release teachers.

Attrition Rates in Wisconsin Public Schools

The data on teacher attrition from 1986-1987 through 1995-1996 in general and special education are presented in Table 8. Various factors influencing the attrition rate are reflected in these data. In 1989-1990 there was a rise in the rate due to a retirement window. This was followed by a decrease in 1990-1991 when the number retiring was sharply reduced. Higher attrition in some years may reflect teacher layoffs due to tighter fiscal restraints. The rates for 1994-1995 showed a sharp increase which may be due to difficulties in validating certain data in the DPI 1994-1995 School Staff and Teacher Report. Data from the past few years have indicated that the attrition rate for general education has been stabilizing around 6 percent with the special education being 11 percent. Since previous years did not take into account the high transfer rate of special education teachers to general education the rate for these years appears inflated compared to the state exit rates. The 1995-1996 state exit attrition rate for elementary education was 5.2%, secondary education was 7.1%, and special education was 5.9%. When the mobility of teachers between elementary, secondary, and special education positions was taken into account the general education state exit rate was only 6.2%. The high rate of transfer of special education teachers to general education fields is a major variable in the higher special education field attrition rate. Table 8.2 also provides information on the mobility of teachers between fields within the State of Wisconsin.

The 1995 edition of this report did a complete analysis of the attrition in each subject field at five-year intervals to project the effect of retirement on future educator needs. The greatest impact of increased retirement will occur as we approach the year 2005 when the teachers whose current ages range 48-52 reach retirement age. This cohort of teachers in general education has the highest number of any five-year interval (22 percent) of the current teaching force. The higher attrition in the field of special education and the relatively younger ages of those teachers suggests that there will not be a concern about increased retirement in the foreseeable future in special education. The 1998 report will repeat this comprehensive attrition analysis.

Projecting the Number of Education Personnel Needed for the Next Five Years

Attrition statistics have been used in the past projection of the future need for educators in Wisconsin and have resulted in inaccurate projections. This has occurred because of policy decisions relating to a retirement window and changes in fiscal policies relating to the funding of school districts. The projection used in this report will follow the new-hires model.

The new-hires model is similar to the analysis shown in Table 7 except that the numbers in the tables are averaged over a three-year period to reduce the effect of yearly fluctuations in the data (Table 9). The advantage of this approach is that many of the error factors that can influence the outcome of the traditional design occur to a lesser extent in this model. The procedure followed in this model is to merge the total state database for the given year and the previous year and identify all the newly-hired teachers for the given year. There are many advantages to this methodology that make it worthy of consideration. There is no need to find the attrition for each subject field since this is a variable in the figure that represents the number of new hires. Also, any enrollment fluctuations, economic factors, or state policy decisions are reflected in the new-hires statistic. The averaging over three years reduces the effect of any one-year surge or decline. Any identifiable and predictable changes in these variables can be incorporated in the new projection to increase the accuracy of this methodology. The projections used in this report will not require modifications in the methodology because there is no evidence that there has been a change in the pupil-teacher-ratio, state fiscal policies have stabilized, and the enrollment increase has averaged only 0.2 percent over the past several years.

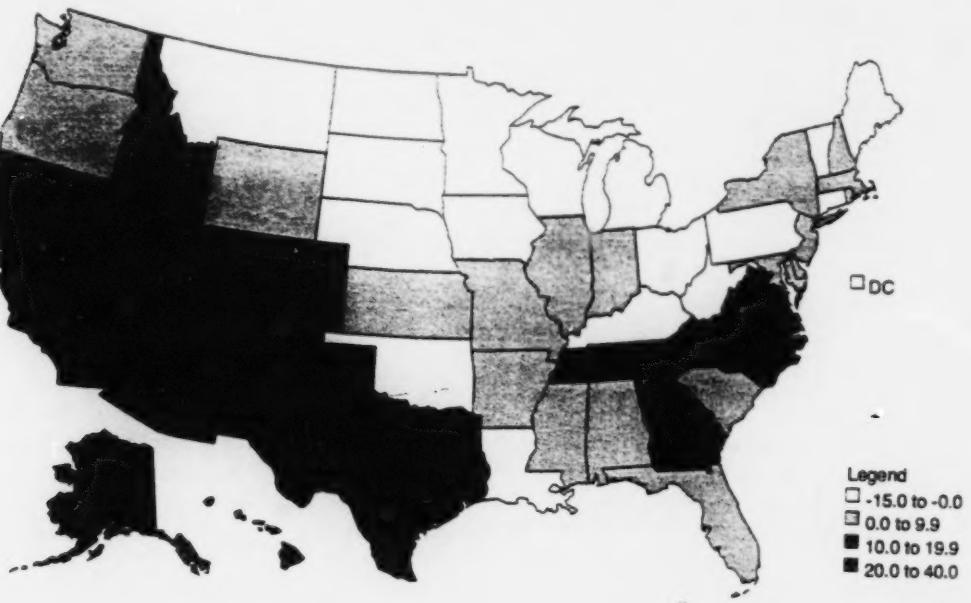
The number of additional personnel that will be needed for Wisconsin's Public Schools in future years largely depends on enrollment projections. Past reports have carefully analyzed several variables (birth rate statistics, private school enrollment, and changes in the state's public school enrollment) to measure their impact on future educator needs. These analyses are not included in this 1996 report since past studies have shown these variables to be relatively stable and thus have not influenced the projections. The National Center for Educational Statistics (1997) has provided data on the projected enrollment through the year 2007. Figure 2 presents the changes in enrollment for grades K-12: the data verifies the projected stability of the student population. These projections are shown in Figure 2.

The data that most accurately projects the number of new teachers that need to be trained each year is seen in Column 8 of Table 9. This number represents the average number of new inexperienced Wisconsin prepared teachers hired over the past three years. A proportion of newly prepared teachers choose not to enter teaching, leave the state for employment, are geographically restricted, or are judged not fit to teach. To account for these factors the state must prepare more teachers than the minimal number shown in Column 8 of Table 9. This adjustment can be made by dividing the number of newly prepared teachers by 50 percent which will increase the numbers to account for these factors. This percentage is based on the professional judgment of the researcher to determine a realistic projection of the number of teachers that should be prepared to meet the needs of the state. The effect of this procedure results in the preparation of two teachers for each position that has been traditionally filled by

new inexperienced teachers. Such factors as the cost of teacher preparation, the loss of professional status of educators as the result of the surplus of qualified teachers, and the needs of school administrators for an adequate pool of candidates were taken into consideration in making this professional judgment.

Figure 2

Percent Change in Grades K-12 Enrollment in Public Schools, by State: Fall 1995 to Fall 2007



Source: National Center for Educational Statistics, 1997

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3. Emergency License Information

Highlights of Findings

- Emergency licenses are issued primarily in the field of special education, especially for teaching students with emotional disturbances and learning disabilities.
- After increasing steadily since 1985-86, the number of emergency licenses issued in special education reached a high of 959 in 1991-92. Since then it has steadily declined to this year's total of 812.
- The continued large number of emergency licenses in special education is in part related to the large number of special education teachers who transfer to general education.
- Emergency licenses issued in general education tend to be in the fields of reading, English as a second language, bilingual education, and science.
- Often emergency licenses are issued in general education because, for example, a district might need a licensed biology teacher to teach one section of chemistry.

Background

An emergency-licensed teacher (ELT) receives licensure from the Wisconsin Department of Public Instruction (DPI) at the request of a school district. The district must provide evidence that a fully licensed educator was not available for the position. The DPI issues emergency licenses to teachers wanting licensing outside their field. In most cases the department issues emergency licenses for a one-year period. During that one-year period, the ELT must complete six credits from an approved preparation program in the field of the emergency license. A rule change (PI 3.03) effective July 1, 1993, permitted three-year emergency licenses in emotional disturbance and learning disabilities. During that period, the educator must complete all credits required for a regular license in that field.

In some cases, the DPI issues emergency licenses in areas when personnel are available in a field but, due to the circumstances described by the district, the exception is considered justifiable. For example, at the elementary level, specialized programs such as bilingual education, foreign language immersion schools, and public Montessori schools may require elementary education emergency licenses issued beyond the specialty training that the program requires. At the secondary level most emergency licenses authorize teachers to teach one or more classes outside of their licensure area and do not typically represent full-time teaching assignments.

In general education, reading and English as a second language (ESL) are the areas in which the greatest number of emergency licenses are issued. Requirements for licensed reading teachers in Title One programs exacerbates the shortages in reading. Increased student diversity requires more licensed ESL and bilingual teachers.

In special education most emergency licenses are granted for programs for students with emotional disturbance and learning disabilities. In addition to factors affecting all license areas, certain special education fields face the impact of program growth and higher attrition, which creates a greater demand for emergency licenses. Teachers in multicategorical (MC) programs (programs serving children in two disability areas) are required to be certified in each area of disability found in the children served in their program. As a result, teachers

with one special education license also may be required to apply for an emergency license for employment in a multicategorical program. Many of the new emergency licenses issued this year to educators teaching cognitively and learning disabled students were for MC programs. A small number of emergency licenses are issued to individuals who teach in private or in residential schools serving students with disabilities.

Special Education

Table 10 presents the total number of teachers teaching on emergency licenses in Wisconsin public schools from 1988 through 1997. The total number was derived by adding the number of one-year permits to the number of one-year specials and three-year licenses for each license area. Permits are issued to individuals who possess a degree outside the field of education.

The information in Table 10 shows the total number of emergency licenses issued in each categorical area and the longitudinal trends in each area. The special education decrease in 1996-1997 was generally across most of the large categorical areas.

A DPI project, Special Education Licensure for Emergency Certified Teachers (SELECT), was designed to reduce the number of emergency licenses for educators working with students with learning disabilities and emotional disturbance. The impact of SELECT and similar federally funded projects will not be evident until after the 1996-1997 school year. Considering these programs and the higher level of preservice preparation currently seen in special education, the number of emergency licenses for special educators should continue to decline. The decrease seen this year in emergency licenses and the lower attrition rate in these fields are positive. The large proportion of special education teachers who transfer to general education remains a significant contributor to the number of emergency licenses in special education (Table 11.1).

The data in Table 11 presents the total number of special education teachers on emergency license in public schools over a nine-year time span. Interpreting the percentage increases and decreases in emergency licenses is complicated for several reasons, including administrative policy decisions regarding the issuance of emergency licenses, fluctuations in the numbers and sizes of special education programs, and changes in the supply of teachers for various subject areas. The emergency licenses in the cognitive and learning disabilities area may in part be attributed to the larger number of these teachers being employed in MC programs.

Previous editions of this report documented what was evident again in this 1997 analysis: that the majority of special education teachers with emergency licenses come from those fields of general education with the largest surplus of teachers. The analysis of the new emergency licenses in 1995-96 showed that almost half of the total new licenses for teachers in emotional disturbance programs went to males. This discrepancy between the gender balance in this field and the gender balance showing a large proportion of males with new emergency licenses was first reported in the 1996 edition of this report

4. Employment Outlook by Individual Subject Field

Highlights of Findings

- During the 1996-1997 school year there was a 4 percent overall decrease in the employability of teachers in most fields from the 1995-1996 school year.
- Several fields with excellent employment prospects were emotional disturbance, speech and language pathology, and technology education, all having a shortage of teachers.
- The same areas which previously had a large surplus of teachers continue to be oversupplied with teachers.

Background

The data used for the employment outlooks for various teaching fields and non-teaching areas are based on all the sources presented in previous chapters. These include the data on the supply of educators (Chapter 1), the demand for educators (Chapter 2), and the number of emergency licenses issued in various areas of education (Chapter 3). The data from the survey (Table 6) sent to each public school district and CESA in the state was converted to maps graphically showing demand for educators in the state. These maps are presented with the subject area recommendations in this chapter. The numbers on the maps represent the number of vacancies listed in each subject field for that geographical area. Positions that were listed at .5 or less were not included in the totals. The maps tend to overestimate the employability since many positions are included that are between .5 and less that full-time. This suppresses the number of applications since most candidates prefer full-time employment. Since different sources of information are used in the recommendations, it is normal to expect some variations in the data. The maps for this reason may differ from other data sources. The researcher along with the advisory committee makes the determination of the relevant weight of each source in formulating the final recommendations. The data from the related services survey and the individual subject field attrition figure presented in the 1995 edition of this report also contributed to the recommendation of the employment outlook of this Chapter. Employability for each subject field and non-teaching area was determined using the following scale:

Excellent-	Chances of employment are high in almost all geographical areas.
Good-	Most educators are able to find a position. This is especially true for those willing to relocate.
Average-	Educators who are patient, willing to relocate, and actively seeking positions should, in time, secure employment.
Poor-	The supply of educators seeking positions exceeds the vacancies. Many educators will not be able to secure a position.
Very Poor-	The supply of educators considerably exceeds the vacancies. Individuals seeking positions will have little chance for employment in the Wisconsin Public Schools over their lifetimes.

Those areas with an extreme shortage of applicants have an excellent rating, slight shortage a good rating, normal supply an average rating, slight oversupply a poor rating, and extreme oversupply a very poor rating. The employability descriptions assigned to the various fields or areas are based on the multiple information sources.

An important factor in determining the recommendations for each subject field is the evaluation of the fluctuation seen in the data due to state policy decisions or the effects of the economy. This past year (1996-1997) there was a slight decline in the employment of teachers. It is not expected that a decline will continue and this factor is taken into account in making the employment projections in this 1997 report. The averages of the employment projections over a three-year period are found in Table 9. This corrects to an extent the yearly fluctuations in new hires and is considered in the projections of this Chapter. The most accurate indicator of the employment outlook for each individual subject field over the past three years is shown in Column 9 of Table 9.

Employment Outlook by Subject Field and Non-teaching Areas

Employment projections by subject field and non-teaching areas are based on the different areas of investigation previously described. Past reports have been relatively stable in these projections. More teachers are available for a given year than the number prepared by Wisconsin colleges and universities in that year. Approximately half of the newly hired teachers are inexperienced teachers prepared in Wisconsin; the remaining are relocating teachers, those prepared out-of-state, and those returning after an interruption in their careers. Further, a large reserve pool of candidates exists for most subject areas.

A district may hire a person to teach at the middle school level in the area of mathematics, science, social studies, or English who is licensed as an elementary teacher (1-8) or licensed in that secondary subject area. Therefore, data on middle school vacancies and the supply of teachers for these programs are more difficult to analyze. The reader is cautioned that some tables are tabulations by the position taught, which would include teachers with an elementary license who are teaching at the middle/junior high school level, while other tables are based on the license held by the teacher. These differences affect the counts in the various tables.

Elementary Education

A total of 1,680 students completed licensure programs in the areas of elementary education and early childhood in Wisconsin during the 1995-1996 school year (Table 1). New, inexperienced Wisconsin-prepared teachers at the kindergarten and elementary levels filled 400 positions in Wisconsin Public Schools (Table 7). The number of newly hired elementary teachers, including those experienced teachers returning to the field and those from other states, totaled 503 (Table 4). For the past several years, newly prepared teachers with elementary education licenses have had a very poor chance of securing an elementary education position in the Wisconsin Public Schools during their careers. The district administrators responding to the employability survey had an overall rating of 1.3 in elementary education, indicating that the number of applications for each position was the highest of all subject fields (Table 6.1). Table 7 shows that the career employment projection for the 1996-1997 school year for Wisconsin-prepared, inexperienced teachers with a single elementary license was 24 percent. Slight decreases in the pupil population are projected in future years, (Figure 2), which will have a modest effect on the need for additional teachers. About 11 percent of Wisconsin-prepared inexperienced teachers find out-of-state teaching employment and an additional 5 percent find positions in private schools as indicated by the placement offices reported in the 1990 edition of this report.

Teachers hired in elementary positions often have licenses in other fields, which may increase their employability if the other fields are in demand. However, data in Table 7 show that only 4 percent of the teachers prepared in elementary education are hired in areas where they have additional licenses. Licenses in most general education fields have only a slight effect on the employability of elementary teachers while reading and ESL tend to improve an individual's chances of finding a position. The area of learning disabilities in special education had the greatest impact on improving an elementary teacher's employability .

The attrition rate for elementary education teachers is predictably greater for the younger teachers and for those nearing retirement. The attrition rate for elementary teachers in 1995-1996 was 5.2 percent. The 1995 edition of this report found that most elementary teachers in 1994-1995 (21 percent) are between the ages of 46 and 50 indicating retirement will not significantly increase the need for new teachers until the approach of the year 2005. The relatively few emergency licenses that are issued in elementary education (Table 10) are for specialized educational programs and do not indicate a shortage of teachers.

Kindergarten

Elementary

OUTLOOK: **Very Poor** The data in this report substantiates previous studies that demonstrate there continues to be a large surplus of teachers for all elementary positions. This will improve in the future only if the number of newly prepared teachers is significantly reduced from the current level.

Secondary/Special Subject Fields

The secondary/speciality subject fields show a different employment picture than other fields of education. The licensing requirements often restrict the flexibility of teachers to find full-time positions since at the secondary level most smaller school districts can offer only one or two sections of most subject fields. Many of the vacancies listed this past year had unusual combinations of licensure requirements which eliminated many candidates from being eligible for consideration. Since these individual fields are relatively small, compared say to elementary education, teachers applying for these positions must be more flexibility to relocate to different geographical areas of the state. Typical of the speciality subject fields (art, music, physical education, family consumer education, technology education) is that few of the teachers have additional licenses (teaching minors) which restricts their flexibility to teach in other fields. These factors in part explain the higher attrition rates found in these areas.

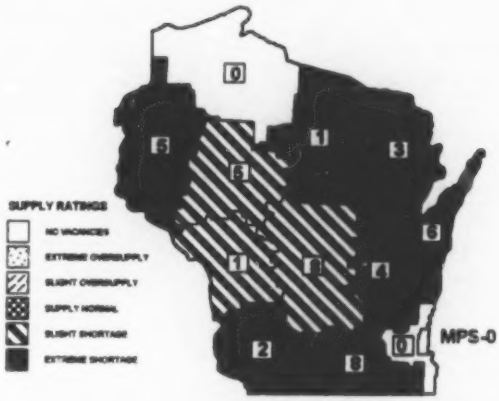
Agriculture

Twenty-nine individuals completed licensure in the area of agriculture in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 16 people (Table 4) in agriculture for the 1996-1997 school year. Of the 16, nine were new, inexperienced Wisconsin prepared teachers (Table 7). Generally, agriculture teachers have not held additional licenses, and many are employed outside of education. The average rating from district administrators was 4.5, which indicates a need for more candidates. A few new teachers also had licenses to teach in the field of biology. The data in Table 5 indicate that the number of newly hired teachers in this

field has been stable for the past few years. The attrition rate reported in the 1995 edition of this report was 7 percent. Only a small number of teachers are over the age of 51 which indicates that retirement will not impact on the need for teachers for some years.

OUTLOOK: **Average to Good** This is a small teaching field with a low level of teacher preparation. The slight rise in the number of newly hired teachers in this field suggests that the previous decline in this teaching field has stabilized. Teacher preparation and the needs of the field seem to be in balance.

Agriculture



Family/Consumer Education

Family/Consumer Education

Sixteen people completed licensure in the area of family and consumer education in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 12 new, inexperienced Wisconsin-prepared teachers in this field (Table 4) for positions for the 1996-1997 school year. The number of teachers hired each year has varied over the past several years, declining to a lower level in 1995-1996 (Table 5). A large reserve pool of teachers in this field has existed for several years which is indicated by the majority of new hires being experienced (Table 4). The current employment outlook for new, inexperienced teachers in family and consumer education was 75 percent for 1996-197 (Table 7). There were not any new hires with teaching licenses in other fields. The data in the survey sent to district administrators, (Table 6.7) was high for both the middle and high school positions, suggesting a shortage of candidates for this field. The attrition rate reported in the 1995 edition of this report was 9 percent. The current level of teacher preparation in this field has declined to the extent that it is now in balance. Also this field will have an increased need for teachers due to a larger number of teachers reaching retirement age in the near future.

OUTLOOK: **Good** The employment outlook for this field has been varied in the past several years. The good rating reflects an improved employment outlook for teachers in this field.

Technology Education

Twenty-four individuals completed licensure in the area of technology education in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 17 new, Wisconsin-prepared teachers without experience for positions in technology education for the 1995-96 school year (Table 7). The trend for the number of new positions for the past few years has varied, reaching a high of 70 for the 1994-95 year (Table 5). The 1996-1997 employment rate for newly prepared teachers in Wisconsin Public Schools was 71 percent (Table 7). The survey returned by school district administrators indicated that there was a severe shortage of candidates for most positions (Table 6.3).

Very few teachers in this field have licenses in other fields of education (only one was hired in an alternative field). This teaching area has many employment opportunities in other states and outside the field of education. The attrition rate reported in the 1995 edition of this report was 6 percent. Since there is virtually only one school in Wisconsin preparing teachers in this field, an adequate supply of educators for this state may be affected if the graduates are not willing to move to assume positions across the state. A relatively high number of projected retirements (reported in the 1995 edition of this report) will have an impact on the number of new teachers needed in the future.

Technology Education

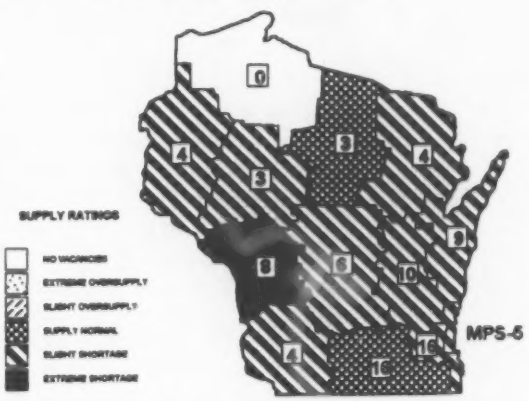
OUTLOOK: **Good to Excellent** The number being prepared is not currently in balance with the educational needs of the state. Considering the employability of individuals in other fields and the anticipated increase in retirements there is a need for an increase in the preparation of teachers in this field.

Business/Marketing Education

Thirty-one people completed business licensure and 31 completed a marketing credential in Wisconsin during 1995-1996 school year (Table 1). Wisconsin Public Schools hired 21 new, Wisconsin-prepared teachers without experience for positions in business and two were hired in marketing during the 1996-1997 school year (Table 7). The employment rating for 1996-1997 shown in Table 7 was 68 percent for business education educators but only ten percent for marketing teachers. The administrators' rating from the survey showed that business candidates were in short supply across many areas of the state. The combined attrition rate as reported in the 1995 edition of this report was 7 percent.

Currently, newly prepared teachers with only a marketing education license have little chance of employment in Wisconsin Public Schools. Based on DPI records, only two teachers secured a marketing position for 1996-1997. Those majoring in several fields of business education, however, enjoy better employment prospects; this is the basis for the "good" rating of this field. A few business/marketing education teachers have licenses in other fields, with several teaching computer science. Individuals prepared as teachers in business education do have opportunities for employment outside of education. The impact of retirement will have a moderate effect on the future needs for educators in this field.

Business/Marketing Education



OUTLOOK: **Good** This recommendation is based on the area of business education excluding the marketing licensing area. The marketing license alone has very limited employment opportunities in the public schools. With business education graduates having a wide range of employment opportunities outside public education, most graduates would have little difficulty

securing employment. The good rating is an improvement from the average rating in the 1996 report.

English/Journalism/Speech/Theater

Two hundred eighty-one people completed licensure in the areas of English/ journalism/speech/theater in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 59 new, Wisconsin-prepared teachers without experience for positions in English/journalism/speech/drama during the 1996-1997 school year in Wisconsin Public Schools (Table 7). Twenty-one percent of those newly licensed in this field secured a teaching position in English and this increased by 6 percent for teachers who are also licensed and employed in other fields (Table 7). The survey from district administrators at the high schools indicated that there was a surplus of candidates for vacancies (Table 6). The attrition rate was 11 percent as reported in the 1995 edition of this report. The discrepancy in the number of teachers in Table 4 and in Table 7 occurs because in Table 7 the count is the FTE number of teachers by position. Currently this licensure area has a more than adequate supply of teachers. The present employment outlook for teachers is very poor, and the future outlook shows little improvement as long as the number being prepared remains high. Some teachers licensed in English also are qualified to teach a foreign language. This improves their employability. It is important to remember that positions at the middle school level include candidates with either elementary education or secondary subject area licenses.

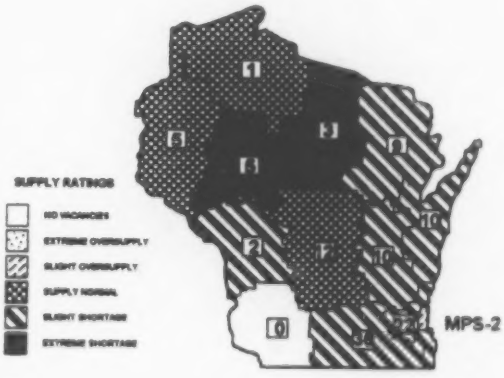
English/Journalism/Speech/Theater

OUTLOOK: **Poor to Very Poor** This rating has remained consistently very poor for the past several years. The slightly higher rating this year was the result of some improvement in the 1996-1997 employability.

Reading

Two hundred forty-one individuals completed licensure in the area of reading in Wisconsin during the 1995-1996 school year (Table 1). Employment projections are more difficult to analyze for reading compared to other teaching fields because qualification in reading is an "add on" license. That is, an educator must be licensed in another field before licensing in reading will be granted. The survey data returned from the district administrators had an average rating of 3.9 (Table 6.5), indicating a moderate shortage. The attrition was 16 percent as presented in the 1995 edition of this report . The consistent yearly data on emergency licenses (125) indicate a shortage of teachers in this field (Table 10). Many teachers are hired from personnel within the district, making it more difficult for those seeking new positions in this area to find employment. The

Reading



impact of future retirements will result in a modest increase in the demand for teachers in this field.

OUTLOOK: **Average to Good** The rating has been consistently average to good over the past several years.

Foreign Language

Starting with the 1996-97 school year, the DPI required that foreign language instruction be available to all public school students in grades 7 and 8. During the past several years the number of newly-hired foreign language teachers has shown considerable variation (Table 5). Over 80 percent of the teachers were hired to teach Spanish in the 1996-1997 year.

Foreign Language

One hundred fifty-three people completed licensure in the area of foreign languages in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired a total of 33 new, Wisconsin-prepared teachers without experience for positions in foreign languages during 1996-1997 (Table 7). An additional 8 teachers with licenses in foreign languages and other fields were employed in such positions as elementary education, English, and English as a second language (Table 7). Twenty-two percent obtained positions in their licensing area of foreign language, and this increased to 27 percent when employment in an additional licensure field was included. The attrition rate in 1993-94 was 9 percent as presented in the 1995 edition of this report. Note that the discrepancy in the number of teachers in Table 4 and in Table 7 occurs because in Table 4 the count is the number of teachers by position, which includes elementary education teachers with an elementary minor teaching foreign languages at the middle/junior high level. This is a good field for elementary education majors to obtain a minor. Future retirements will have only a modest effect in this field.

OUTLOOK: **Average**

The current outlook is on the average based largely on the data in Table 9 which indicated less than half the teachers over the past few years were finding employment in Wisconsin public schools.

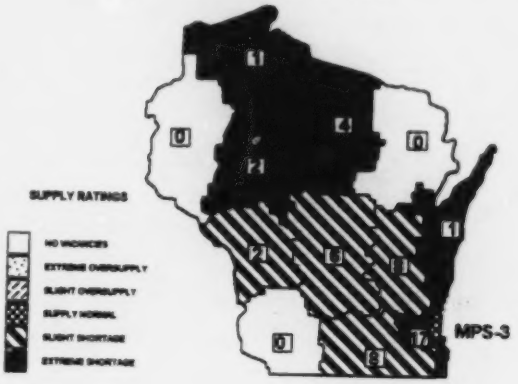
English as a Second Language and Bilingual Education

Fifty-eight individuals completed licensure in the area of English as a second language (ESL) in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 8 new, Wisconsin-prepared teachers (Table 7) for the 1996-1997 school year. All of the newly hired teachers without experience in ESL positions had additional licenses. A relatively low percentage (28 percent) of newly prepared teachers find employment in their licensing area, which increases to 59 percent when employment in alternative fields is considered (Table 7). An indicator of the shortage of licensed teachers is the large number (60) of emergency licenses issued in ESL and an additional 83 were issued in bilingual education (Table 10). The attrition rate for ESL teachers as reported in the 1995 edition of this report was 14 percent. This high attrition rate is in part a reflection of the mobility of the population served. The employment outlook for teachers in this field is largely based on demographic trends, which generally indicate that increasing numbers of students will require the services of teachers prepared in this field.

Following national and state trends, English as a second language continues to be in demand. The employment outlook for bilingual education is also good-especially for those prepared in Spanish.

OUTLOOK: **Good** Teachers with an add-on license in this area of preparation will find increased employability in other fields. There is a need to prepare additional teachers in this field.

English as a Second Language



Mathematics

One hundred seventy-five individuals completed licensure in mathematics in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 34 new, Wisconsin-prepared teachers without experience (Table 7) during the 1996-1997 school year. Nineteen percent of the newly prepared teachers with mathematics licenses found employment in their field in Wisconsin public schools (Table 7). This increased to 25 percent when the teachers that have licenses in additional fields secured positions. The survey from the district administrators gave mathematics a rating indicating an average number of applications for positions (Table 6.3). The employment prospects for mathematics teachers in Wisconsin remains inconsistent with the public perception of a great need. Media stories portray the field of mathematics education as having a shortage of teachers. However, past Wisconsin data have frequently indicated that the job outlook in mathematics was poor. At the middle/junior high school level a large number of teachers with an elementary license and a mathematics minor find employment, reducing the need for teachers prepared with a major or minor at the secondary level. The data in Table 9 show that there has been a low demand for math teachers over the past three years. The attrition rate for mathematics teachers reported in the 1996 edition of this report was 11 percent.

Mathematics

OUTLOOK: **Average to Poor** Based on the available data the employment outlook is realistic and suggests that the current levels of preparation are adequate to meet the needs of this state. The 1996 projection was reduced to average/poor from the projection in 1995 due to reduced employability in the 1996-1997 year.

Music

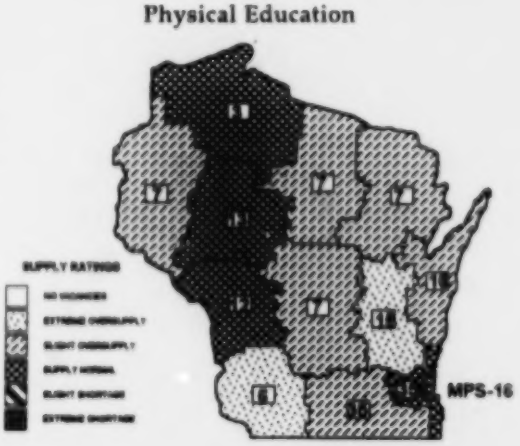
One hundred thirty-one people completed licensure in music in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 37 new, Wisconsin-prepared teachers without experience for positions in music during 1995-96 (Table 7). Twenty-eight percent of the newly prepared teachers with music licenses secured positions in the Wisconsin Public Schools (Table 7). None of the teachers had additional licenses in a second field. The three-year average data on employability (Table 9) suggests a low average rate. The attrition rate reported

in the 1995 edition of this report was eight percent. Future retirements will have only a modest effect on the need for new teachers. The data from the district survey shown on the map is the combined data from elementary, middle, and secondary levels.

OUTLOOK: **Average** The area of music had an average/poor rating in 1996 due in part to the low employment level. The data in this 1997 report suggests a slight improvement.

Physical Education

Two hundred and thirty-three people completed licensure in the area of physical education in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 46 new, Wisconsin-prepared teachers without experience for positions in physical education during the 1996-1997 school year (Table 7). The employment outlook for inexperienced teachers in physical education is 20 percent and the outlook for teachers having additional licenses increases to only 22 percent in the Wisconsin Public Schools (Table 7). The attrition rate reported in the 1995 edition of this report was 7 percent. Future retirement will have little impact. The reserve pool of teachers in this field includes a relatively large number of teachers. The district survey (Table 6) indicated an excess in the number of applications for positions. Based on the response from many districts in Wisconsin, some teachers apply for each opening across this state-often 100 or more. The low attrition figure for this field also reduces employment opportunities for new teachers.



OUTLOOK: **Very Poor** The outlook will remain very poor as long as the level of preparation remains high and the reserve pool is large. This is a lower rating than the very poor to poor rating given in the 1996 report.

Health

The area of health is closely tied to physical education because many teachers in these fields are licensed in both areas. Most of the teachers hired for these positions were given part-time teaching assignments. The health license improves, to only a small extent, the employability of teachers with licenses in other fields. The district survey rating was low to average (Table 6.2) which indicates a low demand for teachers in this field.

OUTLOOK: **Poor** The employment outlook in these related fields will remain at a low level as long as the number of newly prepared teachers remains high.

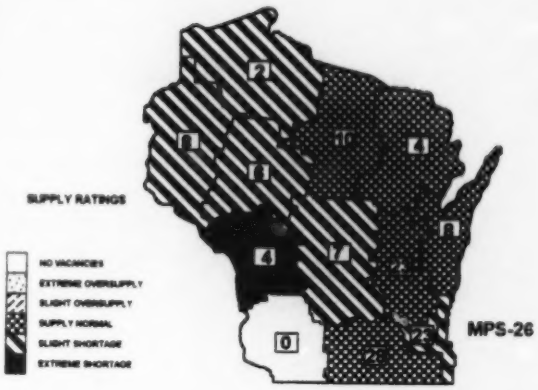
Art

One hundred and nineteen people completed licensure in the area of art in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 30 new, Wisconsin-prepared teachers without experience for positions in art during 1996-1997 (Table 7). Twenty-nine percent

of the newly prepared teachers secured art positions, and another one percent found positions in other fields in which they had licensure (Table 7). The combined rating from the district survey (Table 6.7) showed average employability of applications for positions. The attrition rate reported in the 1995 edition of this report was 5 percent. Retirement will not affect the current employment outlook in the near future. There appears to be a large reserve pool of potential teachers in this field.

OUTLOOK: **Poor to Average** This rating remained the same from the previous year. The rating has fluctuated from poor to average over the past several years.

Art

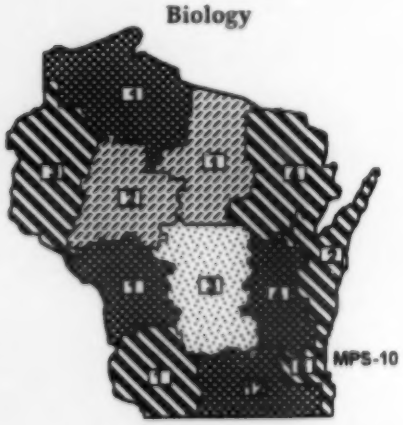


Science

The field of science has drawn considerable national attention as a field with a perceived shortage of teachers. This is due, at least in part, to magazine articles that describe shortages of science teachers. While some studies have been done on this topic, there is still some confusion regarding the employment prospects for science teachers. Wisconsin data have consistently contradicted the perceived shortage. This year for the third time the rating has been "average." The teaching cohort in this field is somewhat older than those in other fields of education, and future retirements will in the near future increase the demand for teachers. The maps shown represent only two of the science fields and the reader is encouraged to see Table 6.3 for comparison with the other science areas.

Science is the only secondary field, other than specialty fields, in which a teacher is required to have a major to be eligible to teach in Wisconsin. This is a major reason that there were 78 emergency licenses issued (Table 10). One hundred and seventy-four people completed licensure in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 46

Biology



Chemistry

Wisconsin-prepared teachers without experience for the 1996-1997 school year in this field (Table 7). The projected employment outlook for teachers licensed only in science is 25 percent. For science teachers with additional licenses, the rate increases by 4 percent in the Wisconsin Public Schools (Table 7). The most common additional licensing area for science teachers was

mathematics. The district survey indicated a shortage in several of the science fields in large part because they were offering only part-time positions to the candidates and often the opening required unusual combinations of licensure. The differences between the different areas of science can be seen in Table 6. The attrition rate reported in the 1995 edition of this report was 9 percent.

In high schools, teaching in some science areas (for example, chemistry and physics) is often a part-time assignment. This makes the employment prospects appear better than they really are. The number of positions at the middle school level includes candidates with either elementary or secondary licenses.

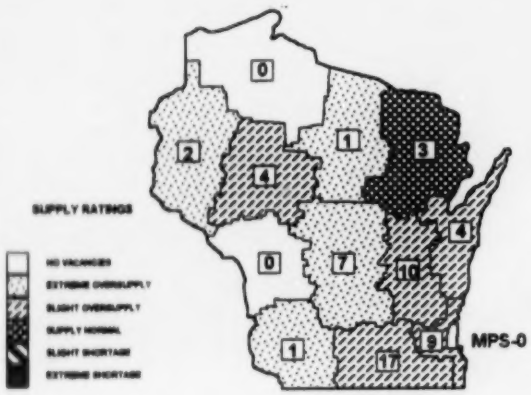
OUTLOOK: **Average** The employment outlook for this field is average for teachers in Wisconsin Public Schools.

Social Studies

Three hundred sixty people completed licensure in the area of social studies in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 48 new teachers without experience for positions in social studies during the 1996-1997 school year (Table 7). The employment projection for social studies positions in the Wisconsin public schools is 13 percent, the lowest rating of all subject fields. Teachers with additional licenses in social studies increase their employment prospects to 21 percent (Table 7). The district survey confirmed the poor employability with one of the lowest ratings given (Table 6). Future retirements will not be a factor in improving employability of teachers since there is a large surplus of teachers in this field.

This is a field with a large reserve pool of teachers, making it very competitive for new teachers trying to find a position. The large number of newly prepared teachers who do not find positions when they finish their preparation programs are added to the number who experienced the same frustration in previous years. The result is a "snowball effect" that is especially noticeable in social studies, physical education, and elementary education. Social studies is a very popular minor for both elementary and secondary majors and a minor in this field has only a small impact on improving the employability of teachers. The number of positions at the middle school level includes candidates with either elementary or secondary licenses.

Social Studies



OUTLOOK: **Very Poor** The data in this and previous reports indicate that social studies has the greatest surplus of teachers of all education fields.

Library/Media

Seventy-one people completed library/media licensure in Wisconsin during the 1995-1996 school year (Table 1). The employability rating for this field is more difficult to determine since the new hires data does not accurately reflect the trends in this field. The attrition rate reported in the 1995 edition of this report was 8 percent. Retirement will increase the demand for teachers in library/media with the largest impact taking place after the year 2000. Data from the report

based on a district wide survey of the number of applications in relationship to vacancies indicated a demand for library/media specialists in many areas of the state (Table 6.5). If anything, the number being prepared could be increased because this field does not have a large reserve pool of potential applicants. In addition, the field of library/media has changed in the past few years as technology has been introduced into libraries on a large scale (for example, computerized card catalogues, databases on CD-Roms, etc.). These factors tend to make those with a background in technology more employable.

Library/Media

OUTLOOK: **Average to Good** The employment outlook for library/media personnel is average to good, considering the current level of preparation and the long-range stability of this field.

Special Education

The field of special education has faced a critical shortage of teachers both nationally and in Wisconsin. Several indicators suggest that some progress is being made in reducing this shortage based on the increased numbers of newly prepared teachers (Table 2), reduction in the number of emergency licenses in Table 11, and the employability projections presented in Table 7. The number of teachers being prepared has increased for the past several years and if this trend continues at the higher rate there will be a balanced supply of teachers in most special education fields except for the areas of emotionally disturbed and speech pathology. Factors still indicate a stronger demand than most other areas of education, in part, based on the higher attrition rate and in part to the transfers to general education.

Hearing Impaired

Six people completed licensure in the area of hearing impaired in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired four new teachers without experience for hearing impaired positions for the 1996-1997 school year (Table 7). The employment prospect for newly prepared teachers with a hearing impaired license employed in their field is best projected over the past three years because of the small number of educators in this field. Table 9 shows that the Wisconsin employability of new inexperienced educators in this field over the past three years was 65 percent. The attrition rate for teachers in this field was 11 percent as reported in the 1995 edition of this report. Teachers in this field who are mobile will be less restricted in securing employment because only a few available positions exist in this low incidence disability area. Data suggests that the number of teachers being prepared meets the state's needs.

OUTLOOK: **Good to Excellent** Teachers prepared in this field who are mobile have a good chance of securing employment. This year's rating is an improvement over the average score in the past year due to the improvement in this year's employability.

Cognitive Disability

One hundred twenty-five people completed licensure in the area of cognitive disabilities (CD) in Wisconsin during the 1995-1996 school year (Table 1). For this report the mild/moderate and the severely handicapped areas are combined. Twenty-seven percent of the new, Wisconsin prepared-teachers without experience secured positions in the CD field, while 12 percent found

positions in fields in which they held an additional license (Table 7). Many of these teachers had licenses in other special education fields which increased their employability (many finding positions in multicategorical programs). The large number of emergency licenses, 75 issued,(Table 11), reflects the fact that many of these licenses are for multicategorical programs and do not necessarily indicate a shortage in the field. The 1995-1996 attrition rate for teachers in this field (Table 8.2) was 11.1 percent, which in part reflects the movement of these teachers to other fields of special education. In the past this field has been oversupplied with teachers. The reserve pool of teachers seeking positions is large and the number of children served in these program areas has declined. Retirement will not increase the demand for teachers in any of the special education fields for many years.

Cognitive Disability

OUTLOOK: **Average** This field was impacted by the multicategorical licensing requirements. This is evident by the numberof individuals licensed in this field who are on emergency licenses and employed in this program area.

Early Childhood: EEN

Early Childhood/EEN

One hundred and seven people completed licensure in the area of Early Childhood: Exceptional Educational Needs (EC:EEN) in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 18 new, Wisconsin-prepared teachers without experience for EC:EEN positions during the 1996-1997 school year (Table 7). The employment prospects for newly prepared teachers in Wisconsin Public Schools with EC:EEN licensure in their field is 17 percent. For those with additional licenses the employment prospects are 31 percent (Table 7). The attrition rate for teachers in this field (Table 8.2) in 1995-1996 was 11.1 percent. It is difficult to assess the staffing needs for public school programs when data are not available to show the need for teachers employed in the birth-to-three age group. The available data do not indicate an additional need for teachers, yet, according to the data from the administrators' survey reported in this study (Table 6.4), a geographic imbalance exists, with shortages in some rural areas of Wisconsin. The increased emphasis on programs for preschool children identified as EC:EEN may increase the numberof teachers needed. The employment outlook for teachers in this field is poor for employment in the public schools. Retirement will not be a factor in the demand for teachers in the near future.

OUTLOOK: **Poor to Average** The past outlook was poor and this new projection is slightly higher based onthe improved three-year average (Table 9) and the need for educators in certain geographical areas. Teachers who are mobile have a greater chance of employment.

Learning Disabilities

Two hundred ninety-eight people completed licensure in the area of learning disabilities (LD) in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 75 newly licensed Wisconsin-prepared teachers without experience (Table 7). The employment prospects for newly prepared, LD teachers without experience employed in their field is 25 percent in Wisconsin Public Schools (Table 11). The attrition rate for teachers in this field in the 1995-1996 (Table 8.2) was 9.5 percent. The district survey (Table 6.4) showed an average rating in most regions of this state and there was a balanced supply of educators. The reserve pool analysis presented in the 1996 edition of this report showed that there was a surplus of teachers in some regions. The number of teachers certified also has increased as reflected in the numbers (Table 1). Some shortage of teachers for children with learning disabilities may exist at the secondary level and in northern and western rural areas of the state.

Learning Disabilities

OUTLOOK: **Average** The current outlook is average for teachers in this field. Teachers with multiple licenses have increased employability. This year's rating is the same as the 1996 rating.

Speech and Language Pathology

Speech and Language Pathology

Ninety-two people completed licensure in the area of speech and language pathology (S/L) in Wisconsin during the 1995-1996 school year (Table 1). The special education field attrition rate for speech therapists in 1995-1996 was 6.6 percent. The total number of emergency licenses issued was 49 (Table 11), indicating a shortage in some areas. A large proportion of speech and language pathologists are employed outside of education, therefore increasing the demand for pathologists to work in public schools. The best indicators of the employment outlook for this field are found in the data from the related services survey presented in the 1995 edition of this report and the survey sent to district administrators in September 1996. These two surveys showed that there is a serious shortage of personnel in this field. The reserve pool analysis in the 1996 report showed some areas with only a slight shortage. The need is greatest in the northern and western rural areas of Wisconsin.

OUTLOOK: **Goodto Excellent** The geographical mobility of therapists is the main determinant in the "good to excellent" rating of this field.

Visually Impaired

There is limited data available in this field since Wisconsin does not prepare teachers in this area. This is the smallest teaching category in special education. A concern is the high attrition rate of 35 percent reported in the 1995 edition of this report, which suggests a high turnover of

teachers. Also this is the special education area with the oldest cohort of teachers. Five new teachers for the visually impaired were hired in 1996-1997 (Table 4). The district administrators' survey gave the highest ratings in special education to the visually impaired category indicating a serious shortage of personnel in this field. The small number of vacancies did not make the data for a map meaningful.

OUTLOOK: **Excellent** Wisconsin will need to increase its out-of-state recruitment effort to meet the future needs of this state. Based on the survey data this is an improved recommendation from the previous year.

Emotional Disturbance

Two hundred and twenty-nine people completed licensure in the area of emotional disturbance (ED) in Wisconsin during the 1995-1996 school year (Table 1). Wisconsin Public Schools hired 41 new teachers for positions in emotional disturbance during the 1996-1997 school year (Table 7). A total of 443 educators were granted emergency licenses (Table 11). The employment percentage (Table 7) is not a good indicator of the employment outlook since it does not reflect the large number of new teachers entering the field with emergency licenses. The district survey (Table 6.4) produced a good rating. Few teachers are hired outside of their licensed field (Table 7). This high level of employability is evident in the large number of teachers employed on emergency licenses (476) in this field (Table 11). The special education field attrition rate for teachers was the highest in special education at 13.8 percent (Table 8.2).

Emotional Disturbance

OUTLOOK: **Excellent to Good** The data demonstrates the critical need for increasing the number of teachers prepared to work with children identified as emotionally disturbed. All the data shows that this field has the greatest shortage of teachers.

Related Services

Related services are relatively difficult areas to investigate primarily because of limitations in the database. Nonetheless, these fields are an important part of the educational services provided in Wisconsin, and the following information will lend some insight into the employment prospects for these fields. The data collected in the 1995 edition of this report is presented as a supplement to the 1997 data since a separate analysis was not done for this report.

School Audiologist

This field is relatively new for this state, (effective July 1, 1994), which accounts for the small number of individuals and limitations of the database. Very few districts had identified vacancies.

OUTLOOK: **Average** This rating is based on the time in months to fill the vacancies and the number of applicants for each position for this new field.

Educational Interpreter

Based on the survey results indicating time to fill the vacancies and the number of applications received, a general picture of the personnel status of this field was determined. There is concern that many of the candidates did not have adequate educational training for the field.

OUTLOOK: **Average** This rating is based on the time in months to fill the vacancies and the number of applicants for each position in this new field.

Physical Therapists

Physical Therapist

The recommendation presented here is based on the related services survey and the district survey sent in September 1996. This year's survey had the highest rating in related services and overall, indicating a shortage more severe than in any other field. Many districts contract people outside of education for this service. Data collected in previous years has consistently indicated a critical shortage of personnel in this field. The survey reported in the 1995 edition of this study showed that there is a severe shortage of physical therapists in all areas of the state. The attrition rate reported in the 1995 edition of this report was high at 17 percent. The comments on the survey from the respondents consistently indicated that the field of physical therapy had the most critical shortage of personnel of any related service area.

OUTLOOK: **Excellent** All the data sources support the recommendation that the employment opportunities are excellent for this field in the public schools.

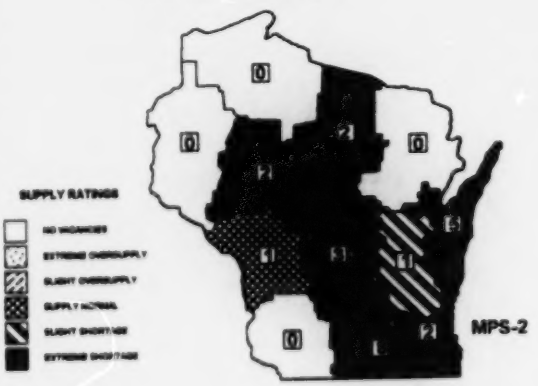
Physical Therapist Assistant

The availability of licensing for this field is new for the State, effective, July 1, 1993, which accounts for the small numbers of individuals in the field and the limitations of the database.

OUTLOOK **Good to Excellent** This recommendation is in part driven by the critical shortage of physical therapists, which should increase the demand for assistants.

Occupational Therapists

Occupational Therapists



The recommendation presented is based on the related services survey and the 1996 survey data in Table 6.5. As with physical therapy many individuals in this field secure positions outside of education. The attrition reported in the 1995 edition of this report was a high 17 percent. This field has the second highest rating in the related services area, indicating a severe shortage of personnel (Table 6.5).

OUTLOOK: **Good to Excellent** There is a shortage of occupational therapists for programs serving children with disabilities.

Occupational Therapist Assistant

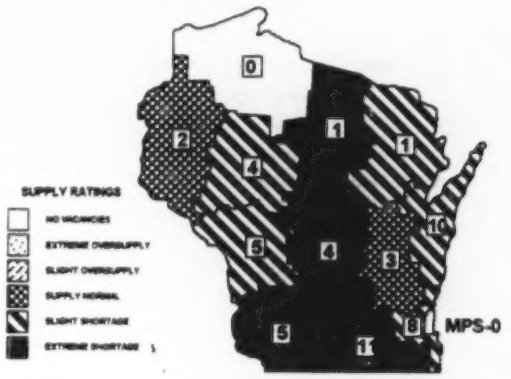
The availability of licensing for this field is relatively new for the state, effective, July 1, 1993, which accounts for the relatively small numbers of individuals in the field and the limited data.

OUTLOOK: **Good** There is a moderate shortage of occupational therapist assistants.

School Psychologists

Ninety-three people completed licensure in Wisconsin during the 1995-1996 school year (Table 1). The data presented here are based on the 1995 related services survey and the 1996 district survey. The district survey showed that here was a high average number of candidates available for positions. During the 1996-1997 school year 29 school psychologists were hired in the public schools (Table 4). The attrition reported in the 1995 edition of this report was 7 percent. The available data suggests that the current level of preparation is adequate to meet the needs of the state.

School Psychologist



OUTLOOK: **Average** The employment outlook for this field is average, with geographical mobility a factor in employment.

School Social Worker

The recommendation presented is based on the related services survey and the 1996 district survey. Forty-five people completed licensure in Wisconsin during the 1995-1996 school year (Table 1). The attrition reported in the 1995 edition of this report was a high 35 percent. The 1996 district survey showed an average need for candidates in this field.

OUTLOOK: **Average** Based on the data available, there is an adequate supply of school social workers available to serve the children in public schools.

Registered Nurse

The recommendation presented is based on the related services survey alone. The data suggests that an adequate supply of registered nurses is available for the public schools.

OUTLOOK: **Average**

School Counselors

One hundred seventy-one people completed licensure in Wisconsin during the 1995-1996 school year (Table 1). The attrition reported in the 1995 edition of this report was 7 percent. The 1996 district survey (Table 6.5) points to an average rating in terms of candidates available in this field.

OUTLOOK: **Average** The number of counselors being prepared meets the needs.

School Counselors

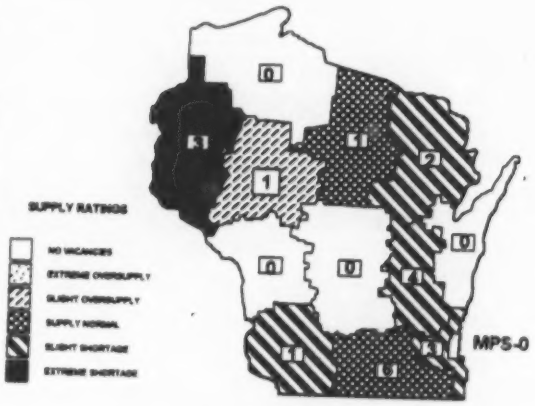
School Administrators

District Administrators

Seventeen people completed licensure in the area of district administrator in Wisconsin during 1995-1996 (Table 1). The data in Table 4 indicated 16 administrative positions were filled in the 1996-1997 school year. The 1996 district survey showed that there were 21 vacancies and the rating for these vacancies was in the high average range suggesting an adequate supply of candidates. The attrition for this field reported in the 1995 edition of this report was 12 percent.

OUTLOOK: **Average** Based on the available data, the number of administrators prepared is in balance with the needs of the field.

District Administrators



Principals

Two hundred and sixty-one people completed a principal program in Wisconsin during the 1995-1996 school year (Table 1). The large number of people prepared far exceeds the employment opportunities. It may be that many licensed teachers who complete a principal license may choose not to seek an administrative position. There were 108 vacancies listed at the elementary level and 81 at the secondary level (Table 6.6). The rating given both the elementary and secondary principal positions were very similar and in the low average range. The attrition rate reported in the 1995 edition of this report was 9 percent.

Elementary Principals

OUTLOOK: **Average to Poor** The outlook for becoming a principal is poor to average for many of those seeking such positions. The ourlook would be even poorer were it not for the fact that many individuals with this licensure apparently do not seek positions.

Director of Special Education

Twenty-three new licenses were reported earned in 1995-1996 (Table 1). Table 4 indicated that 9 directors of special education were hired in 1996-1997. The 1996 district survey showed that there were 29 vacancies (Table 6.6). This same survey gave a good rating of employability based on the number of applicants for each position. The attrition reported in the 1995 edition of this report was a very high 31 percent.

OUTLOOK: **Good** Based on the limited data available there is a shortage of licensed directors of special education.

5. Summary And Recommendations

The following summary and recommendations represent the researcher's points of view based on experience in working with the data. The researcher hopes these recommendations will facilitate the informed use of the findings. A large surplus of educators in most subject areas continues to exist in Wisconsin. The data on the surplus of teachers in many fields represent an opportunity to carefully study the preparation of teachers in Wisconsin. It might be feasible to reallocate funding of teacher preparation programs so that areas of special concern might receive additional support. It seems reasonable for policy makers to make better use of the funds available in Wisconsin to prepare those teachers who will better meet the needs of Wisconsin's public schools by having more flexibility in their licensing and better preparation to meet the demographically changing pupil population.

The researcher recommends that colleges and universities make a more concerted effort to assist prospective educators in understanding the information in this report which will enable them to make more appropriate career decisions. There exists the perception, which is supported by the public media, that there are good employment opportunities in education. The data in this report and past studies have shown that this is not true for Wisconsin. The large proportion of new secondary level teachers who must take only part-time positions is seldom conveyed to teachers in training. Also the large reserve pool of teachers that exists in this state will eliminate any shortfall that might occur with increased retirements. It is important that the findings of this report be communicated to prospective candidates for teaching to facilitate their career decisions, allowing market conditions to help alleviate shortages in certain fields. Students should be encouraged to select fields where shortages exist and be willing to teach in urban and some very rural districts.

The number of emergency licenses in special education reflects some shortages of teachers in which the transfer of special education teachers to general education positions was a contributing factor. Wisconsin's categorical model of service delivery makes it difficult for districts to match the special education needs of students and the fields of preparation of personnel. The researcher recommends that the DPI accelerate the process of modifying current licensing requirements and delivery system models. The shortages of personnel are greatest in the areas of emotional disturbance and speech and language pathology. Also, the increased number of special education teachers graduating from state colleges and universities has improved the supply of special education teachers. This is especially appropriate as efforts are made to educate students with disabilities in general education settings.

The quality of individuals entering the teaching force is, to a large extent, based on competition from other fields. Economic incentives offered by business, computer science, medicine, law, and other professions might limit the number of people with the required abilities and skills entering the field of education. The supply of educators remains, to an extent, a function of the attractiveness of the profession. Thus, it is imperative that all educators be provided every means of support so that the intrinsic value of teaching continues to attract quality individuals.

Over the past several years, the information provided in this report has helped to clarify our understanding of the educator supply and demand picture for Wisconsin. The researcher believes these diverse inquiries will provide information useful in a variety of contexts to improve the quality of the educational opportunities offered for Wisconsin children.

6. Supporting Data

Table 1.1

Number of Program Completers, Wisconsin State Universities, 1995-1996 *

PROGRAM	UW-Eau Claire	UW-Green Bay	UW-La Crosse	UW-Madison	UW-Milwaukee	UW-Oshkosh	UW-Parkside	UW-Platteville	UW-River Falls	UW-Stevens Pt.	UW-Stout	UW-Superior	UW-Whitewater	TOTAL SYSTEM	TOTAL PRIVATE	GRAND TOTAL
Elementary																
80-188 Elementary	82	58	151	126	115	112	46	64	65	112	91	19	196	1237	443	1680
Secondary/Middle																
200 Agriculture	0	0	0	5	0	0	0	3	21	0	0	0	0	29	0	29
210-215 Family/Cons. Ed.	1	0	0	2	0	0	0	0	0	7	6	0	0	16	0	16
220-235, 293-299 Tech. Ed.	1	0	0	0	0	0	0	3	0	0	20	0	0	24	0	24
250-251 Business Ed.	12	0	0	0	0	0	0	0	0	0	0	4	7	23	8	31
285 Marketing	0	0	0	0	0	0	0	0	0	0	31	0	0	31	0	31
300,310,320,325 English	28	6	23	49	13	17	6	3	11	23	0	2	22	203	78	281
315-317 Reading	7	0	7	8	11	52	0	5	11	7	0	13	10	131	110	241
350-390 Foreign Language	15	8	7	27	19	11	4	1	3	8	0	0	22	125	28	153
395 English as a 2nd Language	0	4	0	1	34	0	0	0	0	16	0	0	3	58	0	58
400-430 Math	12	7	7	29	4	6	0	2	8	17	0	5	28	125	50	175
500-515 Music	7	5	2	26	6	7	1	2	5	17	0	4	9	91	40	131
530-536 Physical Education	24	0	75	37	0	14	0	10	21	23	0	5	12	221	12	233
550 Art	4	3	4	23	22	5	1	1	6	5	7	1	15	97	22	119
600-637 Science	7	5	6	55	16	6	0	0	10	28	0	2	13	148	33	181
700-761 Social Studies	15	12	20	63	17	24	1	10	14	35	0	8	18	237	123	360
900-905 Instr. Lib. Media	7	0	2	8	31	10	0	0	0	1	0	0	12	71	0	71
Total Secondary/Middle	140	50	153	333	173	152	13	40	110	187	64	44	171	1630	504	2134
Special Education																
805 Hearing Impaired	0	0	0	0	6	0	0	0	0	0	0	0	0	6	0	6
806 Cog. Dis.	9	0	0	9	10	14	0	0	0	5	27	0	23	97	28	125
808 EC:EEN	26	0	0	10	17	11	0	0	0	5	0	0	12	81	26	107
811 Learning Disabilities	54	0	0	6	25	62	0	0	10	37	0	9	48	251	47	298
820 Speech/Language Path.	8	0	0	18	11	16	0	0	12	13	0	0	7	85	7	92
830 Emotional Disturbance	21	0	4	9	30	37	0	0	0	21	0	17	43	182	47	229
Total Special Education	118	0	4	52	99	140	0	0	22	81	27	26	133	702	155	857
Related Services																
963-967 School Counselor	0	0	0	10	44	18	0	35	17	0	25	12	8	169	2	171
50 School Social Worker	0	0	0	29	16	0	0	0	0	0	0	0	0	45	0	45
62 School Psychologist	7	0	16	6	23	0	0	0	13	0	13	1	10	89	4	93
Total Related Services	7	0	16	45	83	18	0	35	30	0	38	13	18	303	6	309
Administration																
03 Superintendent	0	0	0	4	7	0	0	0	0	0	0	4	0	15	2	17
51 Principal	0	0	52	24	30	0	0	0	0	0	0	30	0	136	125	261
80 Dir. of Sp. Ed./Pup. Ser.	0	0	0	9	5	0	0	0	0	0	0	9	0	23	0	23
Total Administration	0	0	52	37	42	0	0	0	0	0	0	43	0	174	127	301
Total Program	347	108	376	593	512	422	59	139	227	380	220	145	518	4046	1235	5281

* The numbers in Tables 1.1 and 1.2 include individuals with an initial license and any other earned license.

Source: Bureau for Teacher Education, Licensing and Placement, Department of Public Instruction, as reported by the Wisconsin public teacher preparation programs.

Table 1.2

Program Completers, Wisconsin Independent Colleges and Universities, 1995-1996 *

PROGRAM **	Alverno	Beloit	Cardinal Stritch	Carroll College	Carthage	Concordia	Edgewood	Lakeland	Lawrence	Maranatha	Marian	Marquette	Mt. Mary	Mt. Senario	Northland	Ripon	Silver Lake	St. Norbert	Viterbo	Wisconsin Lutheran	TOTAL PRIVATE	TOTAL UW SYSTEM	GRAND TOTAL
Elementary																							
80-188 Elem.	62	9	92	11	29	33	30	2	0	2	21	6	14	9	8	7	36	44	14	14	443	1237	1680
Secondary/Middle																							
200 Agriculture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	29
Fam/Cons. Ed.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16
Techology Educ.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24
250-251 Bus. Ed.	0	0	0	0	0	3	3	1	0	0	0	0	1	0	0	0	0	0	0	0	8	23	31
285 Marketing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	31
Eng./Jour./Speech	10	0	6	4	3	4	9	2	5	1	3	9	3	1	1	1	1	13	0	2	78	203	281
315-317 Reading	0	0	75	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	33	0	110	131	241
Foreign Language	1	2	2	7	1	0	2	3	3	0	1	1	0	0	0	3	0	2	0	0	28	125	153
Eng. as a 2nd Lang.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	58
400-430 Math	3	1	16	5	1	3	3	3	2	0	0	2	1	0	0	0	2	6	1	1	50	125	175
500-515 Music	5	0	0	3	4	2	0	1	8	0	1	0	2	0	1	2	3	3	5	0	40	91	131
530-536 Phy. Ed.	0	0	0	3	5	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	221	233
550 Art	3	1	1	0	0	0	2	0	3	0	0	0	5	0	0	0	3	2	2	0	22	97	119
600-637 Science	2	1	0	5	0	4	4	2	7	0	0	0	0	1	1	0	2	3	1	0	33	148	181
Social Science	6	2	9	17	3	6	8	7	8	1	5	19	5	0	1	0	1	21	0	4	123	237	360
Instr. Lib. Med.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	71
Total Sec./Middle	30	7	109	44	18	25	31	20	36	2	10	31	17	2	4	6	13	50	42	7	504	1630	2134
Special Education																							
805 Hearing Imp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
806 Cog. Dis.	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	28	97	125
808 EC:EEN	0	0	13	0	0	0	6	4	0	0	0	0	0	0	0	0	1	0	2	0	26	81	107
811 Learning Dis.	0	0	15	0	2	0	20	0	0	0	0	0	0	0	0	0	10	0	0	0	47	251	298
Speech/Lang. Path.	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	7	85	92
830 Emot. Dist.	0	0	28	0	0	0	4	0	0	0	0	0	0	0	0	0	15	0	0	0	47	182	229
Total Special Educ.	0	0	79	0	2	0	30	4	0	0	0	7	0	0	0	0	31	0	2	0	155	702	857
Related Services																							
School Counselor	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	169	171
School Soc. Worker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	45
62 School Psy.	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	89	93
Total Related Ser.	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6	303	309
Administration																							
03 District Adm.	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	15	17
51 Principal	0	0	47	0	0	5	19	0	0	0	51	3	0	0	0	0	0	0	0	0	125	136	261
Dir.Sp.Ed./Pup.Ser.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	23
Total Adm.	0	0	47	0	0	5	19	0	0	0	51	5	0	0	0	0	0	0	0	0	127	174	301
Total Program	92	16	327	55	49	63	110	26	36	4	82	55	31	11	12	13	80	94	58	21	1235	4046	5281

* The numbers in Tables 1.1 and 1.2 include individuals with an initial license and any other earned license.

** Some licensing codes were deleted due to space liminations. Please refer to Table 1.1 for a more complete listing.

Source: Bureau for Teacher Education, Licensing and Placement, Department of Public Instruction, as reported by Wisconsin private teacher preparation programs.

Table 2

Number of Program Completers by Level/Speciality, 1980-1996

YEAR	ELEMENTARY	SECONDARY	SPECIAL ED.
80-81	Data Not Collected		861
81-82			826
82-83			780
83-84			919
84-85			738
85-86			733
86-87	2234	2070	765
87-88	2034	2308	678
88-89	2166	2250	707
89-90	2101	2333	742
90-91	2076	1966	505
91-92	1760	1709	530
92-93	1829	1754	718
93-94	1688	2121	709
94-95	1738	1939	793
95-96	1680	2134	857

Source: Bureau for Teacher Education, Licensing and Placement, Department of Public Instruction as Reported by Wisconsin Teacher Preparation Programs, 1980-1996.

Table 3.1

Number of Educators Prepared in Wisconsin State Universities and Newly Hired by Wisconsin Public Schools in 1996-97

PROGRAM	Institution															
	UW-Eau Claire	UW-Green Bay	UW-La Crosse	UW-Madison	UW-Milwaukee	UW-Oshkosh	UW-Parkside	UW-Platteville	UW-River Falls	UW-Stevens Point	UW-Stout	UW-Superior	UW-Whitewater	TOTAL UW SYSTEMS	TOTAL PRIVATE	GRAND TOTAL
Elementary																
80-188 Elementary	9	11	19	37	51	20	9	12	10	27	14	3	46	268	80	348
Secondary/Middle																
200 Agriculture				3				2	5	1				11		11
210-215 Family/Cons. Ed.				1	1					6	5			13		13
220-235,293-299Tech.Ed.			1					3			16			20		20
250-251 Business Ed.	7	1								1	1	1	12	23	4	27
300,310,320,325 English	15	1	8	14	5	8	1	3	1	12			6	74	21	95
315-317 Reading	2	1	5	2	4			1	1	3				19	5	24
350-390 Foreign Language	11	5	3	6	6	10	2	1	1	3			4	52	8	60
395 English as a 2nd Lang.	1	2	1	1				1		1	1			8	1	9
400-430 Math	6	3	4	8	6	6			1	7		3	7	51	17	68
500-515 Music	4	2	2	6	1	3	1	5	1	6		1	11	43	4	47
530-536 Physical Educ.	3		21	5	2	4		5	2	7	1	3	6	59		59
550 Art	2		1	6	11	4	1	1		1	2		3	32	7	39
600-637 Science	10		4	13	8	5	2	3	1	13		1	8	68	11	79
700-761 Social Studies	3	4	4	8	7	11	3	7	4	11		1	7	70	9	79
900-905 Instr. Lib. Media	1		3	4	2				1		1		6	18		18
Total Secondary/Middle	65	19	57	77	53	51	10	32	18	72	27	10	70	561	87	648
Special Education																
805 Hearing Impaired					4									4		4
806 Cog. Dis.	3		1	5	5	1				5	4		6	30	7	37
808 EC:EEN	10			3	2	5				1			4	25	6	31
811 Learning Disabilities	16		4	2	16	8	1	2	1	10	1		10	71	6	77
820 Speech/Language Path.	2			5	1	5			1	11			3	28	3	31
830 Emotional Disturbance	3	1	2	6	8	8				5	3	2	3	41	1	42
Total Special Education	34	1	7	21	36	27	1	2	2	32	8	2	26	199	23	222
Related Services																
963-967 School Counselor				3	7	5		3			6			24	1	25
50 School Social Worker				3	1									4		4
62 School Psychologist			3		5	1					5		1	15	2	18
Total Related Services			3	6	13	6		3			11		1	43	3	46
Total Program	108	31	86	141	153	104	20	49	30	131	60	15	143	1071	193	1264

Source: Wisconsin Educator Supply and Demand Project, 1997. Data from the School Staff and Teacher Personnel Report.

Table 3.2

Number of Educators Prepared in Wisconsin Independent Schools and Universities and Newly Hired by Wisconsin Public Schools in 1996-97

PROGRAM *	Institution																					
	Alverno	Beloit	Cardinal Stritch	Carroll College	Carthage	Concordia	Edgewood	Lakeland	Lawrence	Marian College	Marquette Univ.	Mt. Mary	Mt. Senario	Northland	Ripon	Silver Lake	St. Norbert	Viterbo	Wis. Lutheran	TOTAL PRIVATE	TOTAL UW SYSTEMS	GRAND TOTAL
Elementary																						
Elementary	6		10	8	3		6	9		3	7	8	3				13	3	1	80	268	348
Sec./Middle																						
200 Agriculture																					11	11
Fam./Cons. Ed.																					13	13
Technology. Educ.																					20	20
Business Ed.							1	2									1			4	23	27
Eng./Jour/Sp.				1	3		2	1			2				1		9	2		21	74	95
315-317 Read.			1					1			1			2						5	19	24
Foreign Lang.				3	1			1			2						1			8	52	60
Eng. 2nd Lang.								1												1	8	9
400-430 Math	3		2	2			1	5			2		1					1		17	51	68
500-515 Music				1	1			1	1											4	43	47
Physical Educ.																					59	59
550 Art	1		1				1					4								7	32	39
600-637 Sci.	1		2	1			1	1	1		1	1				1		1		11	68	79
Social Studies	1	1	1		1			1	1	1							2			9	70	79
Inst Lib Media																					18	18
Tot. Sec./Mid.	6	1	7	8	6		6	14	3	1	8	5	1	2	1	1	13	4		87	561	648
Special Education																						
805Hearing Imp.																					4	4
806 Cog. Dis.			3		1								1			2				7	30	37
808 EC:EEN		1	1				3				1									6	25	31
811 Learn. Dis.					3		2									1				6	71	77
Sp./Lang Path.											3									3	28	31
830 Emot. Dist.			1																	1	41	42
Tot. Spec. Educ.		1	5		4		5				4		1			3				23	199	222
Related Services																						
School Counselor												1								1	24	25
50 Soc. Worker																					4	4
62 School Psy.			1								1									2	15	17
Tot. Rel. Ser.			1								1	1								3	43	46
Total Program	12	2	23	16	13		17	23	3	4	20	14	5	2	1	4	26	7	1	193	1071	1264

* Some licensing codes were deleted because of space liminations. See Table 3.1 for a more complete listing.

Source: Wisconsin Educator Supply and Demand Project, 1997. Data from the School Staff and Teacher Personnel Report

Table 4

Sources of Newly Hired Teachers by FTE in Wisconsin Public Schools 1996-1997

	Wis. Newly Hired Educ. Without Experience**		Wisconsin Experienced Educators Returning		Experienced Educators Relocating		Out-of-State Educators Without Experience		Out-of State Educators With Experience		Total
050 Elem. Ed. K-8	**331**	**66%**	**65**	**13%**	**66**	**13%**	**5**	**1%**	**36**	**7%**	**503**
Sec/Spec. Areas *											
200 Agriculture	9	56%	3	19%	3	19%	1	6%	0	0%	16
210-215 Family/Con Ed	10	27%	9	24%	15	41%	1	3%	2	5%	37
220-325,291-99 Tec Ed	17	34%	8	16%	22	44%	1	2%	2	4%	50
250-251 Bus. Ed/Mark.	19	49%	9	23%	6	15%	2	5%	3	8%	39
Eng/Jour/Speech/Drama	73	57%	21	16%	24	19%	6	5%	5	4%	129
315-317 Reading	13	25%	6	12%	24	47%	3	6%	5	10%	51
350-390 Foreign Lang	43	49%	9	10%	20	23%	9	10%	6	7%	87
305 Eng. as a Sec. Lang.	8	40%	4	20%	3	10%	2	10%	3	15%	20
400-430 Math	53	43%	21	17%	38	31%	6	5%	6	5%	124
500-515 Music	36	36%	13	13%	33	33%	10	10%	7	7%	99
530-536, 910 P.E./Hea.	38	45%	14	16%	16	19%	11	13%	6	7%	85
550 Art	29	55%	8	15%	10	19%	3	6%	3	6%	53
600-637 Science	57	41%	21	15%	32	23%	18	13%	10	7%	138
700-761 Social Science	53	62%	8	9%	11	13%	8	9%	5	6%	85
Sec./Spec. Total	**458**	**45%**	**154**	**15%**	**257**	**25%**	**81**	**8%**	**63**	**6%**	**1013**
Special Education											
805 Hearing Disability	4	36%	2	18%	1	9%	3	27%	1	9%	11
806-807 Cognitive Dis.	34	49%	12	17%	12	17%	8	11%	4	6%	70
808 Early Childhood Dis.	17	59%	3	10%	6	21%	2	7%	1	3%	29
811 Learning Disability	72	55%	19	15%	26	20%	6	5%	7	5%	130
825 Visual Disabilities	0	0%	0	0%	1	20%	2	40%	2	40%	5
830 Emotional Dist.	40	38%	16	15%	28	27%	8	8%	13	12%	105
84 Speech/Lang. Path.	28	41%	8	12%	23	34%	4	6%	5	7%	68
Special Educ. Total	**195**	**47%**	**60**	**14%**	**97**	**23%**	**33**	**8%**	**33**	**8%**	**418**
Related Services											
54 School Counselor	23	42%	6	11%	23	42%	2	4%	1	2%	55
55 Psychologist	15	52%	2	7%	9	31%	2	7%	1	3%	29
59 Phy. Therapist ***	1	17%	1	17%	2	33%	1	17%	1	17%	6
63 Occ. Therapist ***	2	18%	1	9%	7	64%	0	0%	1	9%	11
Related Ser. Total	**41**	**41%**	**10**	**10%**	**41**	**41%**	**5**	**5%**	**4**	**4%**	**101**
Adm. Areas											
05,06 Administrator	0	0%	0	0%	9	56%	3	19%	4	25%	16
51 Principal	18	17%	4	4%	67	64%	4	4%	11	11%	104
80 Dir. of Special Ed.	1	11%	1	11%	5	56%	0	0%	2	22%	9
Adm. Total	**19**	**15%**	**5**	**4%**	**81**	**63%**	**7**	**5%**	**17**	**13%**	**129**
GRAND TOTAL	**1044**	**48%**	**294**	**14%**	**542**	**25%**	**131**	**6%**	**153**	**7%**	**2164**

* Some licensing codes were deleted because of space liminations. See Table 3.1 for comparison.

** Percentages do not reflect the elementary licensed teachers employed in middle school level programs.

*** OT and PT numbers do not account for the individuals hired through contracted services.

Source: Wisconsin Educator Supply/Demand Project, 1997. Data from the Staff and Teacher Personnel Report.

Table 5

Number of Newly Hired Educators by FTE from 1992-1993 through1996-1997

	92-93	93-94	Change	94-95	Change	95-96	Change	96-97	Change
Elementary Education									
050 Elem. Ed. K-8)	1009	696	-313	961	265	589	-372	503	-86
Sec/Spec. Areas									
200 Agriculture	18	14	-4	20	6	23	3	16	-7
210-215 Family/Con Ed	26	32	6	50	18	23	-27	37	14
220-325,291-99 Tech Ed	34	47	13	70	23	44	-26	50	6
250-251 Business Ed	28	46	18	54	8	35	-19	39	4
Eng/Jour/Speech/Drama	158	143	-15	217	74	140	-77	129	-11
315-317 Reading	52	75	23	95	20	75	-20	51	-24
350-390 Foreign Lang	104	98	-8	150	52	64	-86	87	23
305 Eng. as a Sec. Lang.	26	29	3	40	11	22	-18	20	-2
400-430 Math	168	174	8	228	54	115	-113	124	9
500-515 Music	138	154	16	174	20	93	-81	99	6
530-536, 910 P.E./Hea.	94	93	-1	134	41	82	-52	85	3
550 Art	89	61	-28	86	25	51	-35	53	2
600-637 Science	140	165	25	227	62	139	-88	138	-1
700-761 Social Science	148	107	-41	158	51	89	-69	85	-4
Sec./Spec. Total	1223	1238	15	1703	995	995	-708	1013	18
Special Education									
805 Hearing Disability	16	13	-3	13	0	14	1	11	11
806-807 Cognitive Dis.	184	76	-108	121	45	62	-59	70	8
808 Early Childhood Dis.	78	47	-31	66	19	38	-28	29	-9
811 Learning Disability	300	199	-101	201	2	181	-20	130	**
825 Visual Disabilities	10	5	-5	7	2	7	0	5	-2
830 Emotional Dist.	268	188	-80	186	-2	222	36	105	**
84 Speech/Lang. Path.	175	91	-84	101	10	43	-58	68	25
Special Educ. Total	1031	619	-412	695	76	567	-128	418	**
Related Services									
55 Psychologist	33	41	8	54	13	28	-26	29	1
59 Phy. Therapist *	60	26	-34	10	-16	7	-3	6	-1
63 Occ. Therapist *	61	19	-42	13	-6	12	-1	11	-1
Related Ser. Total	154	86	-68	77	-9	47	-30	46	-1
GRAND TOTAL	3417	2639	-227	3436	1327	2198	-1238	1980	-218

* Contracted therapists are employees who may not be identified in the state database.

** A comparison cannot be made since the new emergency licenses in the LD and Ed areas were not included in the 1996-1997 data.

Source: Wisconsin Educator Supply and Demand Project, 1997. Data from the Staff and Teacher Personnel Report.

Table 6.1

Elementary Vacancies and Employer Rating

CESA	K		El		Art		Mus		PE		T#1	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.
1	35.5	1.9	179	1.4	9	3	18	2.8	15.8	2.9	6	4.3
2	35	1.9	180	1.3	16.7	3.1	14.2	3.6	15.2	2	3	2
3	7	2.2	21	1.1			3	4	1	2	2	4
4	11	1.9	35.5	1.1	2.5	5	6	3.5	7	2.2	4	3
5	14.5	2	61.5	1.3	4	3.3	6.7	3.5	4.5	1.7	4.5	3
6	20	1.8	67.5	1.3	10.4	3	6.8	3.8	8.7	1.4	4.5	4
7	17.5	1.5	76	1.2	7	3.3	6	3.3	9	1.8	2	4
8	9.6	1.6	23	1.6	1	2	2.5	3.5	1.5	1	6	4
9	4	1	27	1.2	6	3.5	3.5	4.3	0.5		2	2.5
10	12	1.4	27	1.3			4	4	3	3		
11	15	1.7	34	1.1	3	4.7	4	3.8	3	2.3	1	4
12	6	1	17.5	1.7	1.8	4					1.5	3
MPS	28	3	129	2	15	4	7	5	5	3	10	3
Tot.Vac.	225		890		77.4		81.7		75.2		47.9	
Av. Rat.		1.8		1.3		3.3		3.6		2.2		3.5

Key: K-Kindergarden, El-Elementary Education, Art-Art, Mus-Music-PE-Physical Education, and T#1-Title One.

Table 6.2

Middle School Vacancies and Employer Rating

CESA	Art		Eng		F/C		F/L		Mat		Mus		PE		Sci		SS	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.
1	9.3	3	17	2.3	10	4.6	23	3.8	11	2.6	12	3	9	2.7	18	3.3	9	1.6
2	4	2	24	1.9	7	4.4	23.9	4.1	17	2.5	8.5	2.8	9.9	2	16	2.3	17	1.9
3	0.5		2	4					2.5	3.5	1	4	3	1.7	6.5	2.6	1	1
4	1	4	3	3.3	2	5	2	4.5	3.5	3	3.6	3.7	1.5	3	2.5	3.3	0.5	
5	1	4	6	3	2.5	4	4.3	4	10.6	3.3	3.5	3.7			6	4	7	1.3
6	8.5	4	13	3	5.9	4	13.8	3.9	10.5	3.1	4.4	3.5	3.1	2.3	10	3.6	10	1.9
7	1	3	8	1.8	7	4.8	15.2	3.8	2	3	4	3.8	2	2	8	3.8	4	1.5
8	1	3	6	2.5	1	5	3	4			3	3.7	3	1.7	4	3	3	3
9	2	3	5	2	0.5				4.5	4	0.5		1	3	4	3.3	1	1
10	2	3	4	2.7			4	3.7	3	4	3	2.5	4	4	2	4	3.5	1.7
11	2	2.5	8	2.4			8	3.7	3	4	3	3	1	2	5	3.8	2	1
12			1	2			2	4	0.5						0.6	4		
MPS	4	3					8	3	14	4	5	5	4	3	12	5		
Tot. Vac.	39.8		97		35.9		107		87.1		51.5		41.5		96.6		57	
Av. Rat.		3.2		2.4		4.5		3.9		3		3.4		2.2		3.3		1.7

Key: F/C-Family Consumer Education, F/L-Foreign Language, Mat-Mathematics, Sci-Science, and SS-Social Studies.

Table 6.3

High School Vacancies and Employer Rating

CESA	Ag		Art		BE		Dri		Eng		F/C		F/L		HE		Mat	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.
1			3	4	12	3.8			30	2.4	14	4.4	16	3.7	3	3.7	23	3.1
2	7.5	4.5	7	2.6	13	3.4	4	4	32	1.8	7	4.1	20	4	3	2.7	34	2.9
3	2	5			4	3.8			4	3.2	1	5	3	3.3			6	3.4
4	1	4			6.5	4	1	4	6.5	2.6	3	4.5	1	5	1	3	7.8	3.3
5	8	4.4	2	3.5	5	4.4	1.7	4	9.1	2.6	2.3	4.5	6.5	4	1	4	12	3.6
6	3.9	4.8	5	3.8	8.4	4.4	1	5	19	2.8	4	3.8	6	3.7			18	3.5
7	6	4.5			8	4.2	1	5	22	2.3	2	5	10	4.3	2	4	18	3.3
8	3	4.7	2	3	4	4.3	2.2	5	7.5	3.5	4	4.5	6	4			4.5	4
9	1	5	2	3	2	3.5	1	4	5	2.3	2.5	3	4.5	3.3	1.2	2	6	3
10	5	4.3	3.4	3.7	3.2	4	1	4	7.8	3.5	1	3.5	1	4.5			7	4
11	4.5	4.8	2	3.5	4	4	3	5	3	3	2	4	14	3.9			9	3.1
12									4	2.7			2	4			0.5	
MPS			6.5	5	4	3	0.5	4	15	2	4	5	8	4	3	3	25	3
Tot. Vac	41		32		76		21		163		49		98		14		171	
Av. Rat.		4.5		3.2		3.9		4.5		2.5		4.3		4.1		3.2		3.3

Key:Ag-Argiculture, BE-Business Education, Dri-Driver Education, Eng-English, and HE-Health Education.

Table 6.3 (continued)

High School Vacancies and Employer Rating (continued)

CESA	Mus		PE		T/E		Bio		Che		G/S		E/S		Phy		SS	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.
1	7	3.1	10	2.4	23	4.7	6	3.7	10	3.8	8	3	4	3.5	2	4.5	22	1.5
2	7	3.1	10	1.1	19	4.6	12	3.4	5.5	4.2	13	2.9	3	3.3	4.5	4.4	11	1.1
3	2	2.5	2	2	2	5	1	4	3.5	4.3	3	3.7					4.5	1.5
4			3.6	2.8	4	4	1	3	3	3	4.5	4.3			1		3.5	1
5	6	3.2	2	2	8.7	4.7	2.5	1	4	5	2.6	2.5	1	4	4	4.8	10	2
6	7	3.1	3.2	1.3	16	4.6	3.5	3	3.5	4.7	3.5	3.5	5	3.7	2	4	11	1.9
7	8	3.3	5	1.4	10	4.7	2	3.5	1	4	8	2.4	2	4.5	3	4.7	10	1.9
8	3.5	4.3	1	2	12	4.9	3.5	4	2	3	2.5	3			1	4	4	1.5
9	1	5	5.5	1.4	9	4.7	1	2	1	4	5	4					4	2
10	1	5	6	2.2	7	4.5	2	2	2	4.5	4.7	3.5	1	5	1	5	5.5	1.3
11	8	3.4	2	2.5	8	4.4	3.1	4	2.5	3		4.3			0.5		4	1.6
12			3	2.7	4	5	1	3	0.5		2	4.5					1.4	1
MPS	6.5	5	7	4	20	5	10	4	5	5	8	4	2	4	2	5	20	1
Tot. Vac	58		60		143		49		44		73		19		23		113	
Av. Rat.		3.4		1.9		4.7		3.2		4		3.3		3.8		4.6		1.7

Key: T/E-Tech. Educ., Bio-Biology, Che-Chemistry, G/S-Gen. Sci., E/S-Earth Sci., and Phy-Physics.

Table 6. 4

Special Education Vacancies and Employer Rating

CESA	CD		Def		EC		ED		LD		S/L		Vis	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.
1	30	3.2	3.8	4.5	12	3.4	40	4	63	3.2	22	4.4	2	4
2	41	3.7	5.6	5	15	3.6	53	4.2	70	3.7	27	4.5	4	5
3	4	3.5			1	4	2.5	4.5	8.5	4.1	3.2	5		
4	8	3.7			7	3.7	5	4.3	9	3.4	5	4.2		
5	6	4.4	1	5	1	4.5	18	4.2	19	3.7	7	4.4		
6	13	3.8	3	4.5	3.5	3.3	25	4.1	26	3.3	15	4.5	1	5
7	15	4.3	3	4.7	3	4	31	4.8	29	3.8	16	4.6	2	4.5
8	2	4.5	1	5	2	4.5	7	4.6	9.5	4.3	2.5	4.5		
9	6	4.2	3	4.7	1.5	2	6	4.7	12	3.3	2	4.5		
10	7	4.6	2	5	3.5	4	13	5	9.5	4	2	5	2	4
11	5	3			0.5		20	4.3	13	3.8	6	3.8		
12	4.5	4.7	1	5	1	5	8	4.4	3.5	4	1	5	1	5
MPS	35	5	4	4	9	3	33	5	27	4	5	5	2	5
Tot. Vac	177		32		61		260		303		116		14	
Av. Rat.		3.8		4.8		3.9		4.2		3.6		4.5		4.8

Key: CD-Cog. Dis., Def-Deaf, EC-Early Child.:EEN, ED-Emot. Dist., LD-Learn. Dis., S/L-Speech and Lang., and Vis.-Vision.

Table 6. 5

Supportive Services Vacancies and Employer Rating

CESA	ESL		GE		Gui		Lib		OT		Red		PT		Psy		SW	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RT.	NO.	RAT.
1	17	4.6	12	3.7	26	2.9	23	4.1	2	4.5	22	3.7	3	5	8	3.6	1	4
2	8	4.3	6.5	3.7	27	3.7	17	4.1	7.6	4.9	36	4.2	7.2	5	11	4.7	6.6	3.8
3					5	4	3	4.5			0.5				5	4.8	2	4.5
4	2	3.5	1	5	9.8	3.3	3	3.7	1	3	2	4	1	5	5	4.2	3	3.7
5	6	4.3	3	3.7	9	3.5	6	4.2	3	5	12	3.4	1	5	4	4.5	2	1
6	7.9	4.3	7	4.1	11	3.5	7.8	4.4	1	4	9.5	3.7	1	4	3	3.3	1	4
7	1	4.5	1	4	15	4.1	11	4.6	5	4.8	10	4.4	3	5	10	4.1	8	3.5
8			2	2.5	5	4.2	5	5			9	4.1	1	5	1	4		
9	4	4.5	2	4.5	3	4	2	4.5	1.5	5	3	5	1.5	5	1	5	1	2
10	2	5	2.5	5	11	3.8	2	3.5	2	5	4.5	5	1	5	4	4		
11			6	3.5	6.5	3.5	3	4.3	0.5		5	3.4	2.5	5	2	3		
12	1	5			4	4.3	3	4.3	0.5		1	3	0.5				1	4
MPS	3	3			3.5	3			2	5	2	2	2	5				
Tot. Vac	66		44		135		85		26		119		25		53		26	
Av. Rat.		4.3		3.8		3.6		4.3		4.7		3.9		5		4.2		3.6

Key: ESL-English as Second Language, GE-Gifted Education, Gui-Guidance, Lib-Librarian, OT-Occupational Therapist, Red-Reading, PT-Physical Therapist, Psy-Psychologist, and SW-Social Worker.

Table 6.6

Administrative Vacancies and Employer Rating

CESA	BM		C/D		DES		Adm		EP		HSP	
	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.	NO.	RAT.
1	2	2	4	3.3	2	3.5	3	3.6	20	2.8	10	2.8
2	2	4	6	3.3	8	4.5	6	3	19	3	11	3.5
3	1	3	2	5	1	5	1	4	4	3	2	3.5
4	1	4	0	0	1	5	0		4	3.25	11	3.4
5	2	4	2	4.5	0		0		4.5	3.2	5	3.2
6	1	3	1	3	1	3	4	3.7	17	3.2	10	3.5
7	1	3	4	4.3	6	4.6	0		13	4.6	8	3.1
8	2	3.5	3	4	0		2	3.5	5	3.8	4	3
9	0		0		2	5	1	3	6	4	7	3.8
10	0		0		0		1	2	4	3.5	4	4
11	1	4	2	3	3	4.3	3	5	6	3.2	5	3.5
12	0		0		1.8	5	0		2	4	1	2
MPS	0		0		0		0		0		1	1
Tot. Vac	13		24		28.8		21		108		81	
Av. Vac.		3.38		3.75		4.46		3.5		3.3		3.28

Key: BM-Business Manager, C/D-Curriculum Director, DSE-Director of Special Education, Adm-District Administrator, EP-Elementary Principal, and HSP-High School Principal.

Table 6.7

Combined Elementary and Secondary Subject Fields

CESA	Art		Music		Phy. Ed.		Business		Fam./Com.	
	No.	Rat.	No.	Rat.	No.	Rat.	No.	Rat.	No.	Rat.
1	23	3.6	37	3	34.8	2.7	16	3.9	23	4.4
2	28	2.6	31.7	3.3	35.2	2	15.6	3.4	14	4.3
3	0.5	0	7	2.8	6	1.3	4	3.8	1	5
4	3.5	4.5	9.6	3.6	12.1	2.5	7.7	4.6	5	4.7
5	7	3.5	15	3.1	6.5	1.8	6	4.1	4.8	4.7
6	22.5	3.2	17.5	3.3	15	1.4	10.4	3.8	9.9	3.9
7	8	3.3	18	3.4	16	1.6	9	4.4	9	4.8
8	4	2.8	9	3.5	6.5	1.5	4	4.3	5	4.6
9	10	3.3	5	4.5	6.5	1.6	3	2.8	4.5	4
10	6.4	3.5	8	3.7	13	2.8	3.2	4	1	4
11	8	3.7	14	3.2	7	2.3	4	4	2	4
12	1.8	4	0	0	3	2.7	0	0	0	0
MPS	25.5	4	18.5	5	16	3.3	5	4	4	5
Tot.Vac.	149		191		178		87.9		83.2	
Ave. Rat.		3.4		3.44		2.21		3.92		4.41

Source: Wisconsin Educator Supply and Demand Project, 1997

Table 7

Employment Rates for Wisconsin Prepared Teachers First Hired by Wisconsin Public Schools

	Programs Completed by teachers	Employed in License Field 1996-97*		Employed in Other License Field		Total Employed Including Multiple Fields 1996-97	
	1995-96	Number	Percent	Number	Percent	Number	Percent
ELEMENTARY EDUCATION	1	2	3	4	5	6	7
100-188 EL (K-8)	1,680	400	24%	63	4%	463	28%
SECONDARY EDUCATION							
200 Agriculture	29	9	31%	1	3%	10	34%
210-215 Family/Con. Ed.	16	12	75%	0	0%	12	75%
220-235, 293-299 Tech. Ed.	24	17	71%	1	4%	18	75%
250-251,Business	31	21	68%	0	0%	21	68%
285 Marketing Education	31	2	6%	1	3%	3	10%
300, 310, 320, 325							
Eng/Journ/Speech/Drama	281	59	21%	18	6%	77	27%
350-390 Foreign Language	153	33	22%	8	5%	41	27%
395 English as a Second Lang.	58	8	14%	9	16%	17	29%
400-430 Math	175	34	19%	10	5%	44	25%
500-515 Music	131	37	28%	0	0%	37	28%
530-536 Phy. Ed.	233	46	20%	6	3%	52	22%
550 Art	119	30	25%	1	1%	31	26%
600-637 Science	181	46	25%	7	4%	53	29%
700-761 Social Studies	360	48	13%	28	8%	76	21%
SECONDARY TOTAL	1,822	402	22%	90	5%	492	27%
SPECIAL EDUCATION *							
805 Hearing Disabilities	6	4	67%	0	0%	4	67%
806-807 Cognitive Dis.	125	34	27%	15	12%	49	39%
808 Early Childhood	107	18	17%	15	14%	33	31%
811 Learning Disabilities**	298	75	25%	28	9%	103	35%
830 Emotional Disturbance**	229	41	18%	28	12%	69	30%
SPECIAL ED. TOTAL	765	172	22%	86	11%	258	34%
GRAND TOTAL	**4,267**	**974**	**23%**	**239**	**6%**	**1,213**	**28%**

* The number of individuals employed in each licensing field will differ from other tables since in this analysis the counts are by licenses earned rather than by subject position code.

** The numbers of newly hired teachers in learning disabilities and emotional disturbance do not reflect the large number of new emergency licenses in these fields which depresses these counts.

Source: Wisconsin Educator Supply and Demand Project, 1997. Data from various DPI sources.

Table 8.1

Field Attrition Rates of Wisconsin Teachers for 1986-1996 *

	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96
General Ed.	5.8%	6.0%	6.9%	8.0%	4.8%	5.9%	7.8%	6.4%	11.5%	6.5%
Special Ed.	9.2%	9.3%	9.1%	8.7%	6.8%	8.3%	14%	10.9%	14.6%	8.4%

Table 8.2

State Exit Attrition Rates and Field Transfers of Wisconsin Teachers for 1995-1996

Field **	State Exit Attrition	Transfers to Special Educ.	Trans. Within General Educ.
Elementary	5.2 %	19	247
Secondary	7.1 %	21	244
Total General	6.5 %	40	491

Special Educ.	State Exit	Special in Field	Trans. to Gen.	Trans. W/in Sp. Ed.
EarlyChild. EC:EEN	5.4%	11.0%	20	10
Cognitive Dis.	6.7%	11.1%	22	14
Learning Dis.	4.8%	9.5%	66	16
Emotional Dis.	7.4%	13.8%	45	31
Total Special in CD, EC:EEN, LD, & ED	5.90%	11.1%	153	61

* Prior to 1991-92, the teachers on emergency licenses in special education were not included. During the 1993-1994 year the data base was not verified, this would inflate the attrition figure for the 1994-1995 year.

** The variations in the attrition rates are consistent considering the specific fields included in each analysis. Those limited to a specific field will always be higher than those that combine areas. The 8.4 % rate for special education includes only the transfers within special education while the state exit rate includes both the transfers within special education and the transfers to general education which results in a lower rate.

Source: Wisconsin Teacher Supply and Demand, 1997

Table 9

Employment Rates for Wisconsin Prepared Teachers First Hired by Wisconsin Public Schools for 1993-1994 through1996-1997

	Programs Completed by Teachers				Employed in Licensed Field					Total Employed in Licensed Field Plus Multiple Fields				
	93-4	Year 94-5	Year 95-6	Mean	Year 94-5	Year 95-6	Year 96-7	Mean	%	Year 94-5	Year 95-6	Year 96-7	Mean	%
ELEM EDUC.*	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Elem (K-8)	1688	1738	1680	1702	547	352	400	433	25%	722	391	386	500	29%
SEC EDUC														
Agriculture	14	16	29	20	10	7	9	9	44%	15	10	10	12	59%
Family/Con. Ed.	15	22	16	18	18	8	12	13	72%	19	8	12	13	74%
Tech. Ed.	43	42	24	36	37	19	17	24	67%	38	19	18	25	69%
Business	38	46	31	38	26	11	21	19	50%	26	14	19	20	51%
Marketing Educ	33	33	31	32	3	1	2	2	6%	3	2	3	3	8%
Eng/Jo/Sp/Dr	298	252	281	277	78	59	59	65	24%	95	88	77	87	31%
Foreign Lang	156	120	153	143	63	32	33	43	30%	70	51	41	54	38%
Eng /Sec Lang.	28	32	58	39	17	11	8	12	31%	23	23	17	21	53%
Math	204	183	175	187	93	44	34	57	30%	134	56	44	78	42%
Music	129	153	131	138	65	31	37	44	32%	66	32	37	45	33%
Phy. Ed.	191	163	233	196	67	36	46	50	25%	78	41	52	57	29%
Art	96	85	119	100	46	28	30	35	35%	55	31	31	39	39%
Science	174	151	181	169	72	51	46	56	33%	93	62	53	69	41%
Social Studies	359	318	360	346	53	35	48	45	13%	125	73	76	91	26%
SEC. TOTAL	1778	1616	1822	1739	648	373	402	474	27%	840	510	490	613	35%
SPEC. EDUC.														
Hearing Dis	7	4	6	6	4	3	4	4	65%	4	3	4	4	65%
Cognitive Dis.	98	104	125	109	55	28	34	39	36%	92	42	48	61	56%
Early Child	96	119	107	107	40	20	18	26	24%	47	24	33	35	32%
Learn Dis**	252	278	298	276	174	127	75	125	45%	224	155	102	160	58%
Emot Dis**	176	175	229	193	259	172	41	157	81%	273	198	68	180	93%
SP. ED. TOT.	629	680	765	691	532	350	765	549	79%	640	422	255	439	64%
TOTAL	4095	4034	8301	4121	1727	1075	1567	1456	35%	2202	1323	1131	1552	38%

* The licensing codes for individual subject fields are available in Appendix A.

** The new emergency licenses in the fields of LD and ED were added to the number of new hires without experience in 1994-95 and 1995-96 to correct for the error caused by the high number of emergency licenses. This was not done in 1996-1997, which suppresses the number of new hires in learning disabilities and emotional disturbance without experience for this year.

Source: Wisconsin Educator Supply and Demand Project, 1997. Data from various DPI sources.

Table 10

Number of Emergency Licenses Issued in Wisconsin for 1988-1997

	88-9	89-0	90-1	91-2	92-3	93-4	94-5	95-6	96-7
Elementary									
080 Elem.(Nursey)	1	1	3	3	18	16	Merged	Merged	Merged
100-166 Elem. (K-8)	61	61	97	99	86	79	109	123	110
Total Elementary	62	62	100	102	104	95	109	123	110
Secondary Education									
200 Agriculture	1	0	1	2	2	3	2	3	4
210-215 Fam./Con. Ed.	1	7	16	5	17	23	12	3	6
220 Tech Educ.	2	7	9	10	11	11	23	27	42
250-251 Business Ed.	9	1	2	4	9	4	5	4	5
285 Marketing Educ.	No Data	1	3	1	2	4	1	2	2
300,310,320.325 Eng.									
Jour., Speech & Theater	34	28	24	24	16	22	25	30	37
315-317 Reading	100	123	154	163	173	162	154	136	125
350-390 Foreign Lang.	28	35	51	47	64	61	52	44	58
395 Eng. as Sec. Lang	180	90	88	78	79	59	64	63	60
23, 28,33,36,44,49									
Bilingual Education	No Data	No Data	55	87	91	No Data	86	85	83
400-430 Math	28	31	30	32	29	26	29	37	36
450-455 Driv./Saf. Ed.	10	12	20	19	21	22	12	31	36
500-515 Music(K-12)	22	20	30	29	23	21	30	16	30
530-536 Phy. Educ.	10	5	8	8	5	10	9	9	10
910 Health	28	25	29	23	23	15	23	18	19
550 Art (K-12)	10	8	11	11	14	7	7	11	11
600-637 Science	53	49	48	49	65	69	71	63	78
700-761 Social Stud.	51	50	56	48	57	41	38	31	38
900-905 Inst. Lib. Med.	No Data	23	30	37	32	26	24	28	39
Total Secondary/Middle	567	515	665	677	733	606	667	641	719
Special Education									
805 Hearing	1	4	1	2	4	3	4	6	3
806 Cog. Dis.	51	46	71	68	71	89	98	110	104
807 Severely Hand.	No Data	6	7	8	13	Merged	Merged	Merged	Merged
808 Early Childhood *	63	69	75	91	102	80	62	63	58
811 Learn. Disability	323	320	354	338	354	252	224	245	225
820 Speech/Language	44	37	41	39	30	27	37	53	56
825 Visual Disability	0	3	5	2	4	2	1	5	8
830 Emot. Disturbed	448	517	595	619	561	521	511	551	486
Total Special Education	930	1002	1149	1167	1139	974	937	1033	940
Related Services									
963-967 School Couns.	No Data	36	50	42	40	35	41	52	50
50 Social Worker	No Data	No Data	18	7	8	No Data	11	12	5
62 School Psychologist	No Data	No Data	0	0	2	No Data	12	10	7
Total Related Services	No Data	36	68	49	50	35	64	74	62
Grand Total	1559	1615	1962	1995	2026	1710	1777	1871	1831

* Early Childhood EEN numbers have increased because they include "birth to 3" teachers who are not in public school programs.

Source: Bureau for Licensing, Wisconsin Department of Public Instruction, 1997.

Table 11

Number of Special Education Teachers with Emergency Licenses in Wisconsin Public Schools, 1987-1997

	1987-8	1988-9	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7**
HI	0	2	2	0	3	1	2	5	1	1
CD	14	34	36	59	60	49	61	70	79	75
EC:EEN	49	66	72	83	76	64	56	38	37	33
LD	259	264	303	301	274	251	219	202	238	204
S/L	33	25	39	44	34	25	15	37	45	49
VI	0	1	1	5	3	1	2	1	2	7
ED	351	405	431	493	509	486	469	510	476	443
TOTAL*	706	797	884	985	959	877	824	863	878	812

* Total will not match the total of emergency licenses issued since it does not include teachers in child caring institutions and others not in the public school system.

** The new computerized data base did not permit the separation of emergency licenses held by teachers in the public schools and those held by teachers in Child Caring Institutions and private programs. The average difference for the past three years in the total number of emergency licenses each year and the number of licenses issued to teachers in public schools was determined and this correction factor was applied to the 1996-1997 data so that an approximate comparison could be made.

Source: Data from the records of Bureau for Teacher Licensing and Placement.

Appendix: A

License Codes: Wisconsin Department of Public Instruction

Position Codes

03	Superintendent
08	School Business Manager
10	Director of Instruction
51	Principal
50	School Social Worker
61	Provisional School Psychologist
62	School Psychologist
65	Local Vocational Education Coord.
75	School Nurse
80	Director of Special Education and Pupil Services
91	Instructional Library Media Supervisor

Elementary License Grade Level Codes

083	Pre-K - Grade 3
086	Pre-K - Grade 6
088	Pre-K - Grade 8
116	Grade 1-6
118	Grade 1-8

Special Codes

200	Agriculture
210	Family and Consumer Ed. Home Ec.
220	Technology Education
250	Business Education
265	Typewriting
285	Marketing Education
300	English
310	Journalism
316	Reading Teacher
317	Reading Specialist
320	Speech (Academic)
325	Theater
350	Latin
355	French
360	Italian
365	Spanish
370	German
375	Japanese
385	Russian
390	Other Foreign Languages
395	English as a Second Language
400	Mathematics
405	Computer Science
450	Driver Education
455	Safety Education
506	Instrumental Music
511	Choral Music
515	General Music
530	Physical Education
536	Dance
540	Coaching
550	Art
601	Broadfield Science
605	Biology/Life Science
610	Chemistry
615	Environmental Studies
621	Science (6-9)
625	Physics
635	Earth/Space Science
637	Physical Science
701	Broadfield Social Studies
702	Anthropology
710	Economics
715	Geography
725	History
730	Philosophy
735	Political Science
740	Psychology
745	Sociology
760	Other Social Studies
761	Afro-American Studies
805	Hearing Impaired
806	Mild Moderate Cognitive
807	Severely Handicapped
808	Early Childhood: EEN
811	Learning Disabilities
820	Speech/Language Pathology
822	Audiology
830	Emotional Disturbance
859	Adaptive Education
860	Adaptive Physical Education
901	Initial Instructional Library-Media Specialist
902	Instructional Library Media Specialist
903	Instrucitonal Technology
910	Health
966	School Counselor
967	School Counselor-Bilingual

APPENDIX: B

Survey Cover Letter

State of Wisconsin
Department of Public Instruction

Mailing Address: P.O. Box 7841, Madison, WI 53707-7841
125 South Webster Street, Madison, WI 53702 (608) 266-3390/(608) 267-2427 TDD

John T. Benson
State Superintendent

Robert H. Gomoll
Deputy State Superintendent

September 16, 1996

Dear Administrator:

The Wisconsin Department of Public Instruction is requesting your cooperation in providing information about the supply of and demand for education personnel in your district. The information from local school districts has proven vital to understanding the size of the active reserve pool of teachers seeking positions in public schools and its relationship to the current demand for personnel. This survey is being sent to each school district in the State so the geographical differences can be presented.

The data collected from this study will be a part of the comprehensive report for this State which may be used by various agencies for policy decisions. This information is of particular importance to the University of Wisconsin System Administration which has the responsibility to evaluate teacher education programs. Previous surveys dealing with this issue have proven to be the best indicator of the various geographical needs in the State.

The survey to collect this information has been developed to minimize the time required of each district to respond while obtaining the pertinent data for the study. If your district has a prepared list of vacancies, please include it with the survey and our staff will record this information. Also, if you would indicate the number of applicants (or an estimate) for each teaching field with a vacancy, this would be appreciated. If you provide both a list of vacancies and a list of the number of applications, you do not need to complete the survey form.

The data collected for this study should be based on the vacancies for the 1996-97 school year. Please complete the survey whether or not all vacancies have been filled. A post paid return envelope is enclosed for your convenience. Feel free to make any comments on the back of the survey form if you want to contribute additional information.

I appreciate your cooperation with this project. If you have any questions, please feel free to contact my office.

Sincerely,

Peter J. Burke, Director
Division for Learning Support: Instructional Services

APPENDIX: C

Survey Form

Educator Supply and Demand Rating Scale for School District Analysis

Name of District	Administrator

INSTRUCTIONS: At the end of the subject field, column A, there is a space for you to indicate the number of vacancies that were filled in your district for the 1996-97 school year. At the right of the subject field, column B, use the numerical code below to express your opinion on the teacher supply based on the number of applications you received in relation to the vacancies in your district for the 1996-97 school year. The standard for rating the number of qualified licensed applicants per vacancy that represents the supply is: 50 plus applications per vacancy for extreme oversupply (rated 1), 30-49 for oversupply (rated 2), 16-29 for balanced (rated 3), 6-15 for shortage (rated 4), and a 5 or less for extreme shortage (rated 5). Leave blank those subject areas for which your district did not have vacancies. **Please return the completed form in the enclosed envelope by October 15, 1996.**

A rating of 1 through 2 represents an increasing degree of teacher oversupply.

A rating of 4 through 5 represents an increasing degree of teacher shortage.

Extreme Oversupply	Slight Oversupply	Supply Normal to Demand	Slight Shortage	Extreme Shortage
1	2	3	4	5
(50 + appl.)	(30-49 appl.)	(16-29 appl.)	(6-15 appl.)	(0-5 appl.)

A Number of Vacancies		B Rating Number
	Elem. Level	
	Kindergarten	
	Elementary (1-6)	
	Art	
	Music	
	Physical Education	
	Middle Level	
	Art	
	Business Education	
	Eng./Language Arts	
	Family/Consumer Education	
	Foreign Language	
	Health Education	
	Mathematics	
	Music	
	Physical Education	
	Science	
	Social Science	
	Other	
	High School Level	
	Agriculture	
	Art	
	Business Education	
	Driver/Safety Education	
	Eng/Jour/Speech/Drama	
	Family/Consumer Educ	
	Foreign Language	
	Health Education	
	Mathematics	
	Music	
	Physical Education	
	Technology Education	
	Biology	
	Chemistry	
	General Science	
	Earth Science	
	Physics	
	Social Sciences	
	Other	
	Special Education	
	Cognitive Disabilities	
	Deaf/Hard of Hearing	
	Early Childhood:EEN	
	Emotional Disturbance	
	Learning Disabilities	
	Speech and Language Pathology	
	Visually Impaired	
	Specialized Personnel	
	Eng. as Second Lang/Bilingual	
	Gifted Education	
	Guidance Counselor	
	Librarian/Media Specialist	
	Local Voc. Ed. Coord	
	Occupational Therapist	
	Reading Teacher/Specialist	
	Physical Therapist	
	School Nurse	
	School Psychologist	
	School Social Worker	
	Other	
	Administrators	
	Business Manager	
	Curriculum Director	
	Director of Special Education	
	District Administrator	
	Elementary /Middle Principal	
	High School Principal	
	Other	

Does your district have any policies that would limit the number of fully licensed applicants (e.g. teacher testing standard) ?

Yes_____ No_____ If yes, please specify_____

Please feel free to make any comments you feel could contribute to this study on the back of this form.

APPENDIX D

Representative Comments from District Administrators

"Goodness of fit"

Over 600 applications for two elementary positions.

Two hundred and seventy-five applications for two openings at sixth grade.

Found no one to fill a technology education position.

I would not want my son or daughter to go into elementary education. For every good teacher hired, there are 45 good ones without jobs.

Where I indicated an extreme shortage at the high school level, I mean extreme. For our physics/chemistry opening, we had one (1) applicant. We are in the same position with the math area. We are back to the "warm body" in the classroom mode. However, in social studies we had 195 applicants for one opening. Along the same line, when we had an elementary opening last year I believe we had close to 300 applicants for one position. To compound the problem the few applicants we do have in secondary math and science are really mediocre at best. This problem will get worse as more retirements occur.

Multiple licenses

Smaller schools need secondary teachers with multiple combinations of licensing fields (ex. chemistry/physics and physical education/geography).

Requested a broadfield science teacher to teach the following courses: biology, chemistry, physics and physical science. We are a district of 297 students (K-12). We have only one teacher per grade or subject area. We need a person certified in a broad range of sciences to teach our high school courses. This is the second year in a row we have had to hire for this position. Not one applicant was fully certified.

Date of Openings

Note: We had three resignation four days before the start of the school year. We found an extreme shortage of qualified candidates this late in the year.

Some of our vacancies came at the end of summer when quality applicants were non-existent. Certification requirements for a librarian definitely limit the number of candidates.

Much depends on when the vacancy is realized. To find a June-July replacement is more difficult than in April-May. Also a supply may seem to be adequate, but quality may be the issue.

One reason we had so few applicants (6 or 7 with only two I would consider) was the timing. We had less than two weeks to fill the position.

Part-time Positions

Some position were part-time, therefore the applicant pool was limited more by the FTE than the total position.

The high school level vacancies were all for part-time positions and/or "combination" positions.

We had a large number of elementary positions open this year due to the opening of a new school and due to the start-up of a charter school this year. The positions at the charter school were not all full-time positions, but some of the positions for the part-time people were hard to fill (especially art, music and physical education because they were often .2 positions).

Part-time positions are particularly difficult to fill for reasons unrelated to the field of study.

District Administrators

In 1995-1996 the district experienced difficulty in having "qualified " people apply for the district adminisrator position. The prior year we has the same problem for high school principal.

There is quanity but not quality for administrative positions.